

The Big Squeeze:



How taxes
are squeezing your income;
how interest rates
are squeezing
your assets.



Muhlenkamp & Company, Inc.
Intelligent Investment Management



Ronald H. Muhlenkamp is founder and president of Muhlenkamp & Company, Inc., established in 1977. He is a nationally recognized, award-winning investment manager, frequent guest of the media, and featured speaker at investment conferences nationwide. He has developed a proprietary method of evaluating both equity and fixed income securities, which continues to be employed by Muhlenkamp & Company. In addition to publishing a quarterly newsletter, *Muhlenkamp Memorandum*, Mr. Muhlenkamp is the author of *Ron's Road to Wealth: Insights for the Curious Investor*.

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This booklet, ***The Big Squeeze: How taxes are squeezing your income; how interest rates are squeezing your assets***, is an adaptation of the presentations that Ron Muhlenkamp, Portfolio Manager, and Jeff Muhlenkamp, Investment Analyst, delivered at the Muhlenkamp & Company investment seminar in May 2013. Jeff Muhlenkamp addressed how low interest rates impact companies' defined benefit pension plans.

Archives of past seminars are available at www.muhlenkamp.com.

We hope you find this booklet useful. Let us know what you think.

The Big Squeeze: How taxes are squeezing your income; How interest rates are squeezing your assets

Ron Muhlenkamp began the presentation...

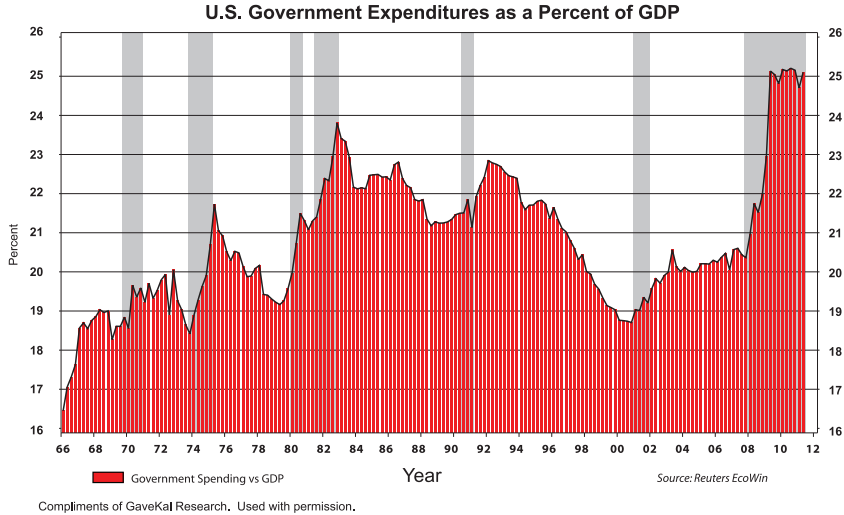
I find that many of the things we see today are similar to what we've seen before. For instance, the government budget deficits today look much like the deficits of the 1980s. And concerns about China today are similar to concerns we had about Japan in the 1970s.

This is especially true for today's seminar topic. Over the past years, I've written extensively about the self-defeating nature of excessive taxation and how interest rates and inflation affect your purchasing power. Today's seminar is a synthesis of 40 years of observations based on facts. Due to time constraints, you'll be getting the "Cliff's Notes" or *Reader's Digest* version. For additional information, please refer to the Appendix which includes the source materials.

How Taxes Are Squeezing Your Income

In October 1996 I wrote *The Trouble with Government Spending*, offering my perspective on taxes, federal spending, and their effects on the economy. In that essay, I assert that personal and national wealth production only occur in the private (nongovernmental) market because when the government gets involved, work incentives decrease and spending becomes less efficient.

Figure 1 U.S. Government Expenditures as a Percent of GDP



As you can see from Figure 1, back in 1966, U.S. government spending as a percent of Gross Domestic Product (GDP) averaged 16%-17 percent. Due to the “Great Society”¹ and inflation, this amount grew to over 23% in the early 1980s and remained steady (over 21%) for about a decade. In the late 1990s, President Clinton (1992-2000) got it down to 19 percent.

Since 2000, government spending has been on the rise, with a significant increase over the last four years. Federal government spending in 2012 was nearly 25% of U.S. GDP.

Figure 2 U.S. Treasury Federal Budget Yearly Total Outlays and Receipts as a Percent of GDP

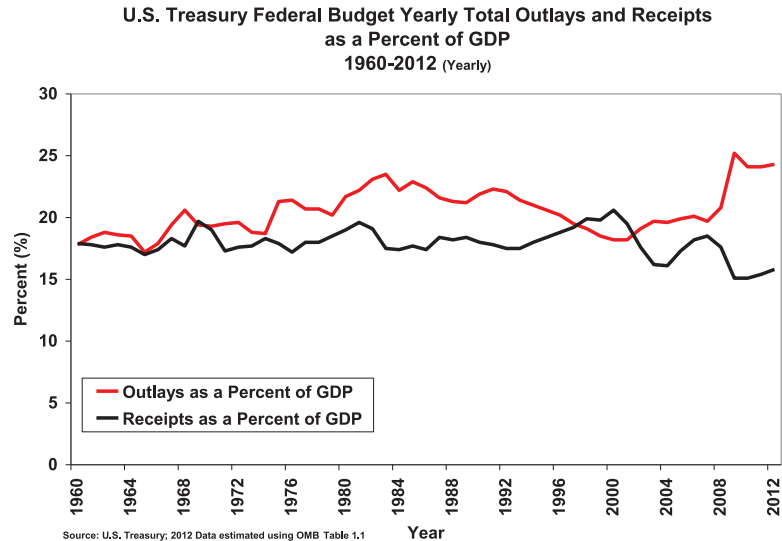


Figure 2 is a plot of the U.S. Treasury Federal Budget, including yearly outlays and receipts as a percent of GDP since 1960. The black line refers to the “receipts”—what you and I call taxes; the red line presents the outlays (spending).

Historically, government receipts as a percent of GDP average 18%-20%—regardless of various levels of taxation. In 1960, the top tax rate was 90%, which President Kennedy (1961-63) lowered to 70 percent. In 1986, President Reagan (1981-89) lowered the top tax rate from 70% to 28 percent.

We had balanced budgets in 1960, 1965, and 1969, when government outlays were about 18% of GDP. Eventually, the outlays began to grow... During the Clinton years (1993-2001), government outlays as a percent of GDP shrank from 22% to 20%, and, briefly, for a couple of years, we had a surplus. Since 2000 government outlays have run up—especially so in the past four years.

Partly because of the 2008-09 recession, government receipts have decreased to the point where outlays exceed receipts by 6%-7% of GDP as of mid-2013.

Figure 3 2012 U.S. GDP, Federal Government Outlays, Revenues, and Deficit per Household

2012 U.S. GDP, Federal Government Outlays, Revenues, and Deficit per Household

GDP/ household	Liabilities/ household	Income Tax/ household	Max Rev=20% GDP/ household	Expenses/ household	Deficit/ household
\$131,017	\$132,560	\$20,235	\$26,203	\$29,212	\$8,977

Source: Budget of U.S. Government Historical Tables; 2014 Budget; Barack H. Obama

In the U.S., there are approximately 118 million households and U.S. GDP is \$16 trillion, so our GDP per household is about \$131,000. Our stated total liabilities are approaching \$17 trillion, so the debt per household is on the order of \$133,000; (this number excludes promises made for Social Security, Medicare, etc.).

¹ The “Great Society” was a set of domestic spending programs initiated by President Johnson (1963-69), including Medicare, Medicaid, expansion of the federal food stamp program, federal education funding (e.g. “Head Start”), enhancements to public broadcasting, and a variety of community-based anti-poverty initiatives. The Great Society’s programs expanded under the administrations of President Nixon (1969-74) and President Ford (1974-77).

Federal government revenues (tax receipts) are on the order of \$20,235 per household, and federal government expenses (spending) are \$29,212 per household...leading to a federal deficit per household of \$8,977 per year that we're passing onto our kids!

Think about it... If your kids told you that they were earning \$20,000 per year and spending \$30,000 per year, what would you tell them? You would tell them to earn more money! But what if the best wage they can possibly earn in their profession is \$26,000; i.e. 20% of GDP? (Historically, 20% of GDP is what taxes generate in revenues—regardless of the rates on income taxes.) So, you'd be forced to tell your kids to spend less!

Figure 3 makes the numbers real to me. There have been times in my life where I borrowed 30% of what I spent—like the government is now doing—but I couldn't do that forever, so I found ways to earn more, spend less, and to get my budget into better shape.

Figure 4 2013 Income Tax Brackets: Married Filing Jointly

2013 Income Tax Brackets: Married Filing Jointly

<u>Taxable Income</u>	<u>Tax Rate</u>
\$0 - \$17,850	10%
\$17,850 - \$72,500	15%
\$72,500 - \$146,400	25%
\$146,400 - \$223,050	28%
\$223,050 - \$398,350	33%
\$398,350 - \$450,000	35%
\$450,000 +	39.6%

Source: Tax Foundation

To welcome in the New Year, Congress and the Obama administration addressed one side of the deficit problem: government revenues (taxes).

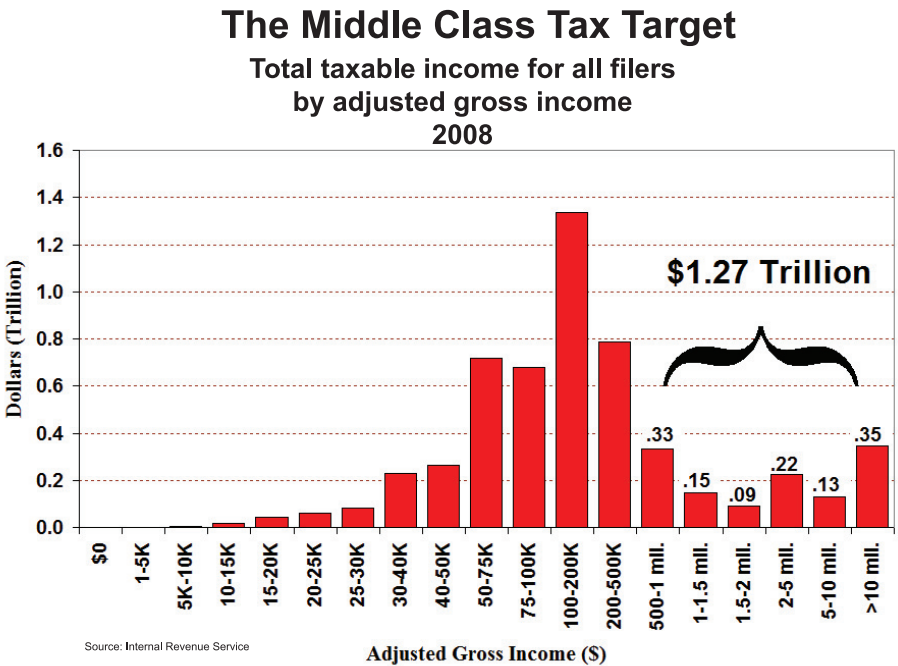
As you can see from Figure 4, for most Americans, they've gone halfway, keeping income tax rates at prior levels for those couples earning less than \$450,000 per year. But they also allowed the payroll "tax holiday" to expire, so automatic deductions for FICA (Social Security) taxes increased by 2% of gross pay for nearly all wage earners. This helps fund the Social Security program (which now pays out more than it takes in on an annual basis), but has, of course, decreased take-home pay for nearly all wage earners by this same 2 percent.

So we have clarification on what tax rates are going forward, but Congress has not yet addressed the greater issue of federal government spending. The basic problem in government spending is that our politicians have made promises they are unable to keep. Here's a simple example in Medicare:

Medicare was enacted in 1965. To the average retiree over age 65, the current Medicare schedule promises benefits which are three times what they've paid into the program. This was viable in the past when the ratio of workers to retirees was 3:1, but, due to baby boomers retiring, we are rapidly transitioning (in the next 10-15 years) to a worker-retiree ratio of 2:1. Simple arithmetic says that to remain viable, Medicare taxes must increase by 50%, benefits must be cut by one-third, or some combination of the two. But no one wants their benefits to be cut! And if you raise tax rates too high, people will lower their incomes as they did in the 1970s. (Remember tax shelters?)

So far, Congress has chosen to deal with the overall deficit problem by borrowing money. In each of the last four years, the borrowing has exceeded \$1 trillion, approximately \$9,000 per U.S. household.

Figure 5 The Middle Class Tax Target



One of the suggestions for fixing the deficit is to raise taxes on higher-income people. Figure 5 is a plot of the total taxable income for all filers by adjusted gross income. (The source of the 2008 data is the Internal Revenue Service.)

If all the people who had more than \$500,000 in adjusted gross income were taxed at 100%, it would generate \$1.27 trillion in tax revenues. Note that this amount would not close the deficit! And, if you did tax all of it, how much do you think they would earn the next year? How much would you be willing to earn if your income were taxed at 100 percent? My point is there simply isn't enough income at the high end to close the gap. By the way, England tried this recently. England raised taxes on higher-income people and, the next year, it had fewer higher-income people.

To drive this point home, (back in 1980) a friend of mine who taught at Duquesne University sketched the following scenario based on a five-day work week:

- Monday, you pay 10% in taxes on your earnings.
- Tuesday, you pay 20% in taxes on your earnings.
- Wednesday, you pay 30% in taxes on your earnings.
- Thursday, you pay 40% in taxes on your earnings.
- Friday, you pay 50% in taxes on your earnings.

How many of you would come to work on Friday? Over the years, I have asked several thousand people per year this question. In the 1980s, I used to get 2%-5% of hands going up. Lately, I'm getting zero. People are telling me that at a 50% tax bracket, they will quit working.

**Figure 6 Highest and Lowest Tax Rates with Top Bracket
"Real" Income Threshold**

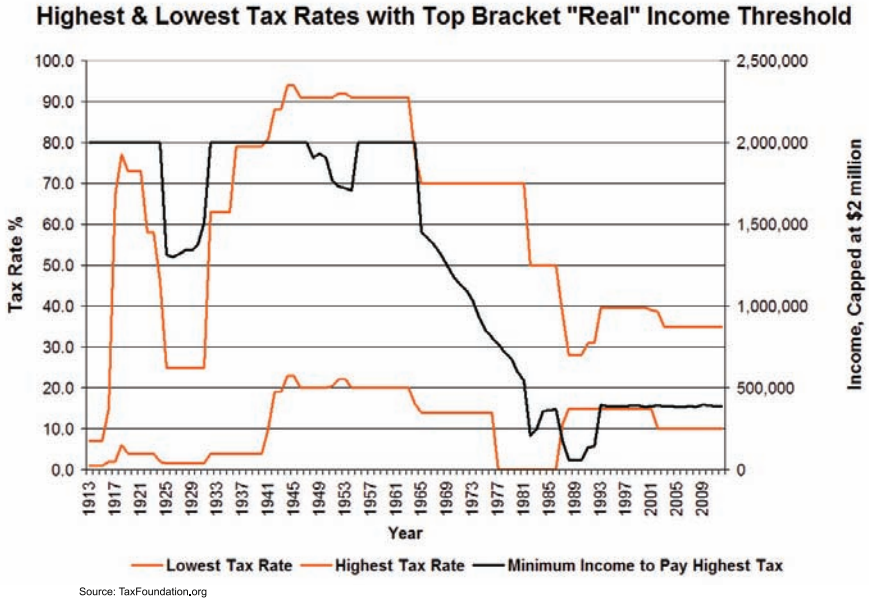


Figure 6 is a plot going back to 1913, when the federal income tax was instituted. The orange line at the bottom shows the lowest tax rate, which began at 1 percent. The top orange line shows the highest tax rate; it began as 7 percent.

Along came World War I and, in a short time, the highest rate increased to 75 percent. After World War I, the top rate dropped to 25% for a brief period, and then ramped up to 90% in the 1940s. It stayed there until Kennedy lowered the top federal income tax from 90% to 70 percent. Reagan lowered it in two steps from 70% to 28 percent. Bush (one, 1989-93) raised it to 39.6% and Bush (two, 2001-09) lowered it to 35 percent.

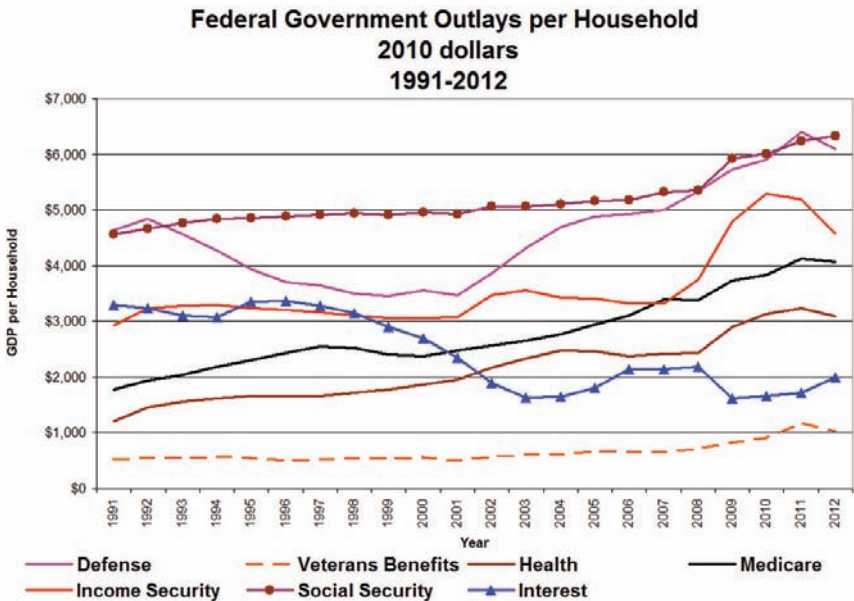
Some people say that in the past we've had federal income tax rates of 70% and 90%—and the economy kept booming. Well, the other part of the plot on Figure 6, the black line, shows the minimum income required to pay the highest tax. (On this plot, the minimum income threshold is capped at \$2 million.) In today's dollars, if you earned \$42 million during World War 1, you were in the 75% tax bracket. In the 1930s, the equivalent rate in today's dollars would have been \$82 million. And, in the 1950s, it kicked in at \$3 million. The point is that the top rate kicked in at a high enough income that it didn't affect very many people.

In the 1960s-70s, however, the combination of lowering the minimum threshold and inflation reducing the value of your money, such that by the end of the 1970s, the top tax bracket at 70% kicked in for people earning as little as \$250,000-\$300,000. So you had a lot of doctors playing golf... All the tax shelters in the 1970s (that you never heard about in the 1950s) were driven by a lot of wage earners being in the top tax bracket.

There is a huge difference between a 70% rate that kicks in at \$3 million and a 70% rate that kicks in at \$300,000. So, yes, in the past we had good growth with high taxes, but it affected very few people.

The point is, most of the things that you hear have a germ of truth—or were true at one time—often there are qualifiers that make it not quite as simple as it is held out to be.

Figure 7 Federal Government Outlays per Household



Household numbers from US Census Bureau Historical Time Series table HH-1

Source of Budget data: U.S. 2012 Budget Historical Tables, Tables 1.1 and 3.1, U.S. Office of Management and Budget
2011 & 2012 Estimated

Just about everybody's eyes glaze over when we talk about billions and trillions of dollars. As a result, I wrote *One Family's Perspective on the U.S. Federal Budget* back in 1988.

People have told us that Figure 7 is helpful when examining government data from a household perspective. It is a plot of the top seven categories where our federal government spends money:

1. Social Security (brown line with dots) has moved from the number two position to number one, now accounting for over \$6,000 per household in federal spending. It was increasing at about the rate of GDP until 2008, at which point it started increasing rapidly.
2. In 1991, Defense spending (purple line) was the single largest federal outlay at about \$4,600 per household in 2010 dollars. It declined to about \$3,600 per household during the drawdown after the Gulf War, and rapidly increased after 9/11/01. In 2012, this category accounted for over \$6,000 per household in federal spending.

3. Interest expense (blue line with triangles) has come down even though total debt outstanding has increased because interest rates have come down faster than the debt has run up.
4. The Income Security category (red line), which includes general retirement and disability insurance, unemployment compensation, housing assistance, food and nutrition assistance, and federal employee retirement and disability outlays, went from \$3,000 per household in 1991 to over \$5,000 per household in 2011. Because a piece of this is sensitive to economic cycles (e.g. unemployment compensation and food stamps), this category came down a bit as employment improved in 2012.
5. Medicare (black line) has been on a pretty steady march upwards, doubling from just under \$2,000 per household in 1991 to just over \$4,000 per household in 2012. (Note: People over age 65 constitute 16% of our population.)
6. Health spending (brown line) is mostly Medicaid. In 2012 89% of this number was Medicaid, the remaining 11% consisted of health care services, health research and training, and consumer and occupational health. It has more than doubled from 1991 to 2010. In 2012, this category cost each household about \$3,100.
7. Veterans Benefits (dashed orange line) has gradually increased since 2007.

For years thoughtful analysts have warned that Social Security, Medicare, and Medicaid were unsustainable in the long run and changes needed to be made. The increase in federal spending that was prompted by the 2008-09 recession has moved these problems from the intermediate term into the near term—we no longer have the luxury of postponing the discussion.

Overall, Figure 7 highlights to me that of the top seven spending categories, two are at cyclical highs: Defense and Income Security. These categories are coming down as employment increases and the wars end. But, the remaining three, Social Security, Medicare, and Health (Medicaid), have steadily increased over the last 20 years. If these categories continue to increase at that rate, they will dominate federal outlays.

How Interest Rates are Squeezing Your Assets

The federal government can't balance its budget by taxing your income, so it's coming after your assets. How is it doing that?

Figure 8 Inflation Rate, 1990-2013

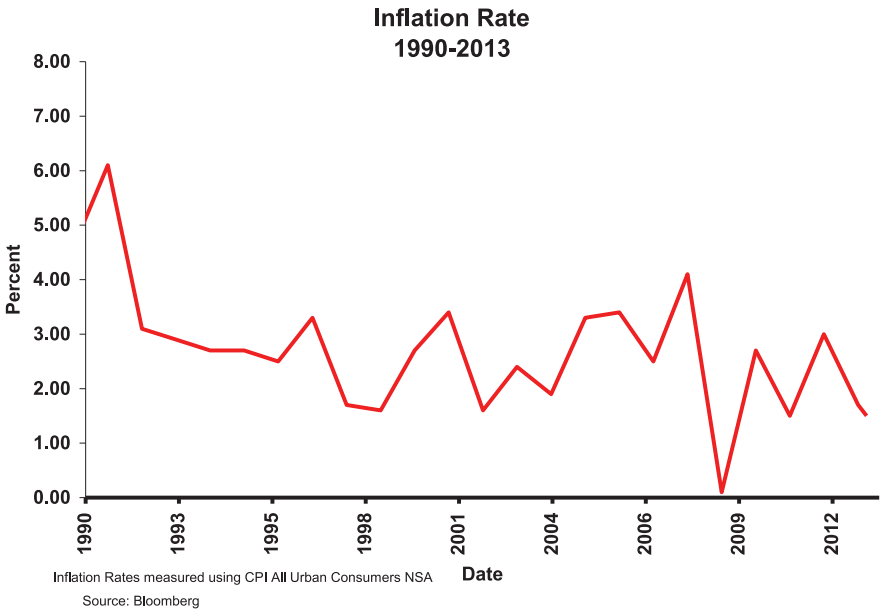
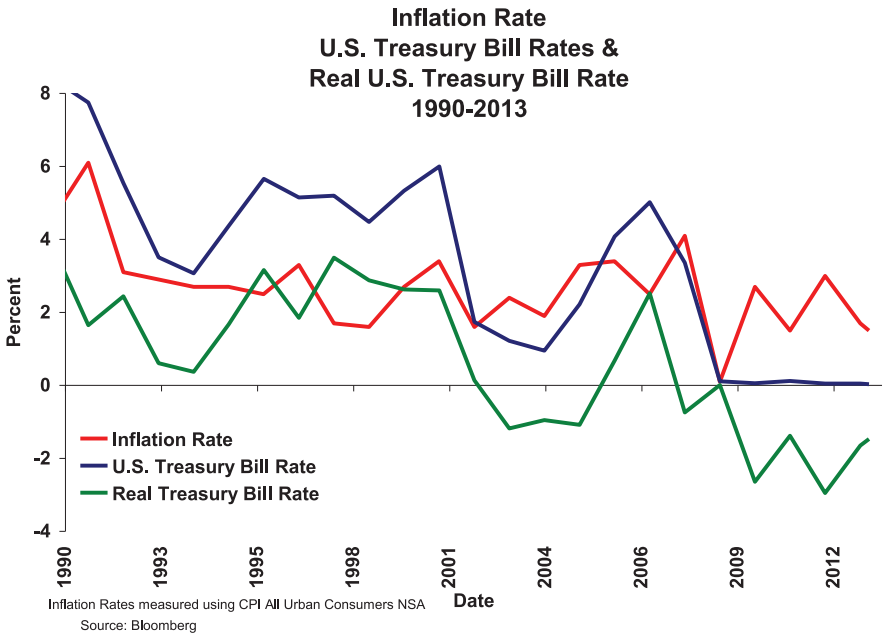


Figure 8 plots the Consumer Price Index (CPI), which is the standard measure of inflation. Most people, as consumers, think of inflation as prices moving up. As investors, we think of inflation not as prices moving up, but as the value of money shrinking. Historically, inflation in this country has been 3%; today, it's approximately 2 percent.

Short-term interest rates have roughly equaled inflation. So if the Federal Reserve (Fed) didn't have its thumb on the scales right now, short-term rates would be at 2%, rather than 0.25 percent. As you can see from the following chart, the real return (nominal rate minus inflation) on a Treasury Bill is below zero:

Figure 9 Inflation Rate: U.S. Treasury Bill Rates and Real U.S. Treasury Bill Rate, 1990-2013

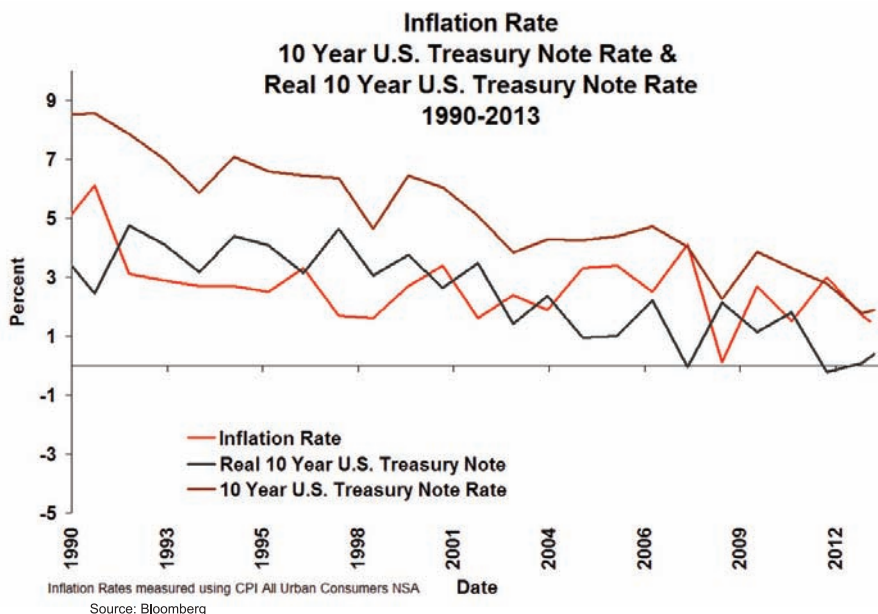


This chart shows the inflation rate (red line) and the nominal rate of the U.S. Treasury Bill (black line), along with and its real rate (green line).

Historically, you've been able to make a little money, pre-tax, on a Treasury Bill (T Bill). For the last 3-4 years, you could not. As you can see from Figure 9, you cannot protect the purchasing power of your assets today in short-term debt.

If we look at the 10-year Treasury Note, it's the same deal:

Figure 10 Inflation Rate: 10-Year U.S. Treasury Note Rate and Real 10-Year U.S. Treasury Note Rate, 1990-2013



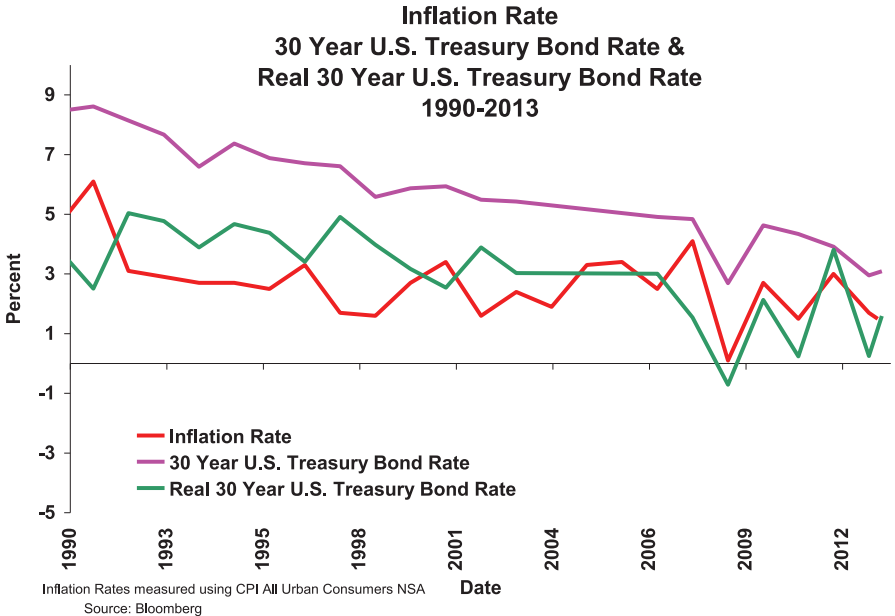
In Figure 10, the red line indicates inflation and the brown line plots the nominal interest rate on the 10-year U.S. Treasury Note. It was above 8% back in 1990; it is now on the order of 2 percent.

If you subtract inflation from that, you get a real return—which was 3% during most of the 1990s—and is now zero (black line). So, pre-tax, you can just offset inflation with a 10-year Treasury Note—you can't increase your purchasing power.

In late 2008-early 2009, interest rates on 10-year Treasuries dropped dramatically because of fear. We had witnessed the demise of financial powerhouses, the extension of credit coming to a halt, and uncertainty (accompanied by volatility) that generated wide swings in market prices and values. People wanted the safety of U.S. Treasuries; so they sold Corporate Bonds, driving their interest rates up—and they bought U.S. Treasuries, driving their interest rates down.

Subsequently, the Fed took steps to ensure that interest rates would remain low...

Figure 11 Inflation Rate: 30-Year U.S. Treasury Bond Rate and Real 30-Year U.S. Treasury Bond Rate, 1990-2013



Once again, in Figure 11, the red line is the inflation rate. The purple line is the 30-year Treasury Bond nominal rate. In 1990, it charted at 8%; it is currently on the order of 3 percent. Subtract inflation (2%) and, in the last two years, you have been able to make just a little bit of money, pre-tax, on 30-year Treasuries (green line).

The long and short of it is you cannot keep the purchasing power of your assets intact in Treasury Bills or Bonds!

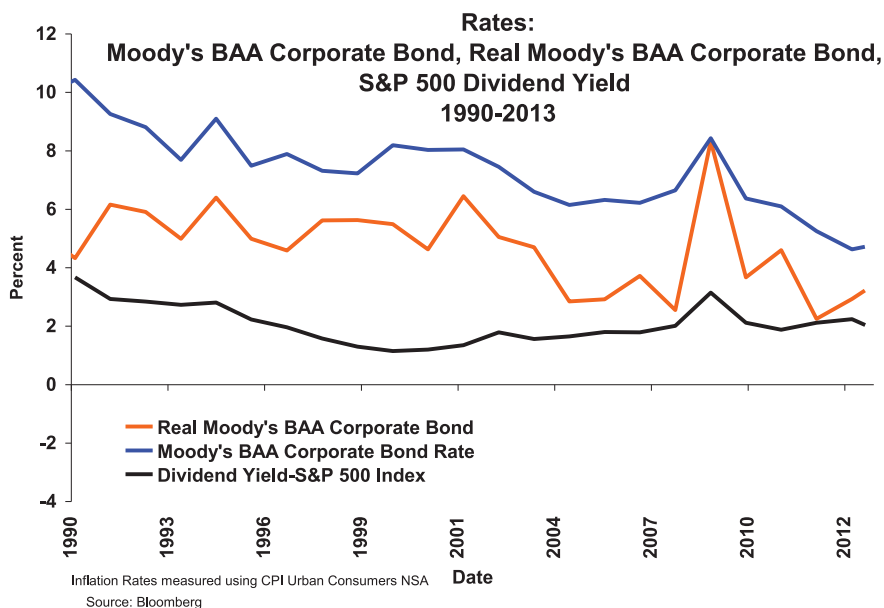
The whole presumption behind keeping interest rates low is that 30-year olds will spend more—they'll buy houses and cars. But it does not appear that cheap financing alone is enough to cause the consumer to take on additional debt—consumer debt continues to fall in the aggregate. Nevertheless, it seems the assumption of people in Washington is that low interest rates will encourage spending because they are thinking of the 30-something's—not the population at large. (For example, when there was a \$250 supplement to Social Security in 2009, retirees saved 80% of it.)

We think the Fed's actions are problematic. Here's why:

In 2009, inflation was negative and the growth of GDP was negative, so interest rates at 0.25% were above inflation and GDP growth—a normal place for rates to be. Since then, inflation has moved up to a positive number, and GDP growth has moved up to a positive number, so interest rates should be moving up—but they're not. Because everybody thinks in terms of nominal rates (versus “real” rates; i.e. net of inflation), as soon as the Fed starts raising rates, our congressmen and the media respond by saying, “the Fed is tightening.” But having interest rates too low for too long is what got us into this mess in the first place. My fear is we'll repeat that. That's not a prediction—that's a fear, so it's something we're watching.

How are low interest rates affecting the stock market?

Figure 12 Rates: Moody's BAA Corporate Bond, Real Moody's BAA Corporate Bond, S&P 500 Dividend Yield, 1990-2013



In Figure 12, the blue line plots the nominal rate on BAA Corporate Bonds, and the orange line plots the “real” interest rate. The black line indicates the (nominal) dividend yield on the S&P 500 Index.

Prior to 1957, dividend yields on stocks were higher than interest rates on bonds—everybody knew that you owned stocks for the dividends. In 1957, that reversed: dividend rates went below interest rates, at which point people said, “The stock market is overvalued.” But there were other folks saying, “If you invest in companies for more than just the dividend, maybe...you are investing for growth.” The idea of investing in growth stocks was a brand new idea. We are back to the point where the yield on **some** stocks is greater than the yield on bonds.

Two years ago we bought AT&T stock because its dividend yield was higher than the interest yield on its bonds—and the payout was about 60 percent. So, unless AT&T totally blew the rest of its earnings, there was a cushion on the dividend yield, while there was no cushion on the bond yield. In the last year, if the “big heavies” (large, stable companies) yielded more than 3% on their dividend, it’s very likely their stock did very well.

Currently, we do not own utilities or telecom, including AT&T. We sold out because we thought they got fully priced. Today, the S&P 500 Index includes ten industry sectors—two of which, utilities and telecommunications, have higher P/Es (price-to-earnings ratios) than everything else. Who would have thought that AT&T would have a higher P/E than Microsoft or Intel?

We think that the Fed’s manipulation of real interest rates/returns drove people out of bonds and into stocks as bond substitutes. (And we were happy to ride part of that move.) The Fed is doing this on purpose, partly to subsidize the federal government at the expense of savers. Low interest rates are hurting savers and retirees—and killing pension plans.

Figure 13 LIBOR and U.S. Treasury Bill Rates, 2000-4/30/13

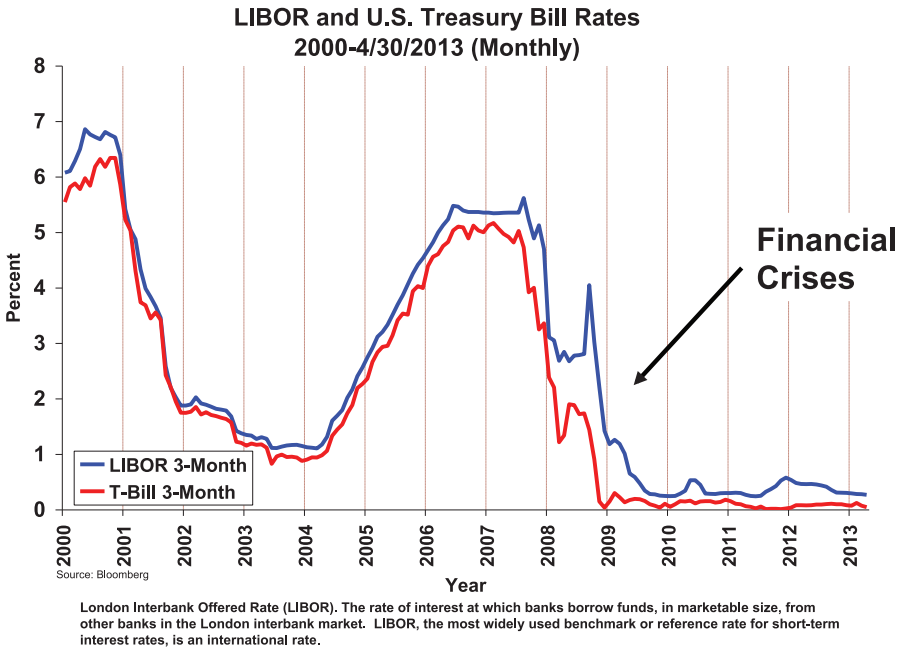


Figure 13 is a plot of LIBOR (London Interbank Offered Rate), along with the three-month Treasury Bill rate, going back to 2000. As you can see, most of the time, these rates track closely together, but during the financial crisis of late 2008, Treasuries went to near zero and LIBOR went to 3½%-4 percent.

The financial crisis in the U.S. has been over for four years. The budget deficit remains, but the financial crisis ended four years ago. Nevertheless, the Fed has kept short-term interest rates at levels that made sense at the end of 2009 but, in our opinion, make no sense today.

Figure 14 Three Month U.S. Treasury Bill Rates, 2005-2013

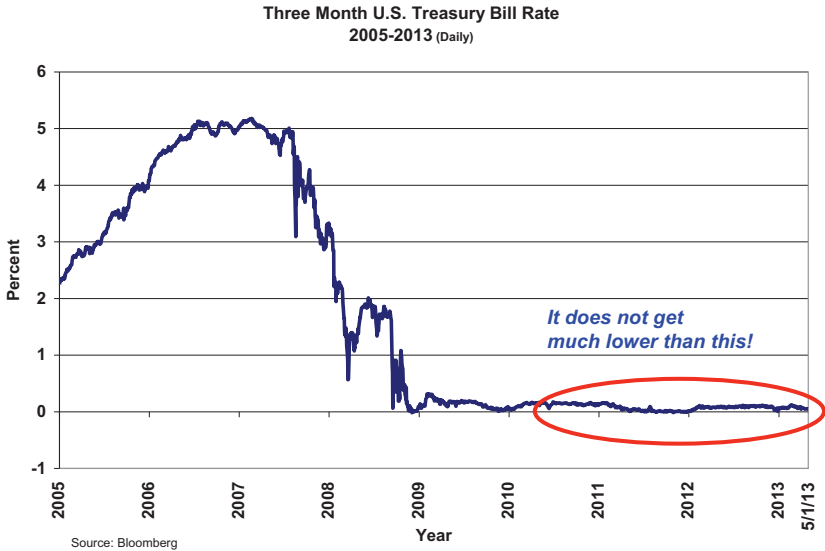


Figure 14 plots the three-month Treasury Bill rate since 2005. It doesn't get any lower than this!

Figure 15 Moody's Corporate Bond BAA vs. 30-Year Mortgage Rate, vs. U.S. Treasury Note Rate, 2005-2013

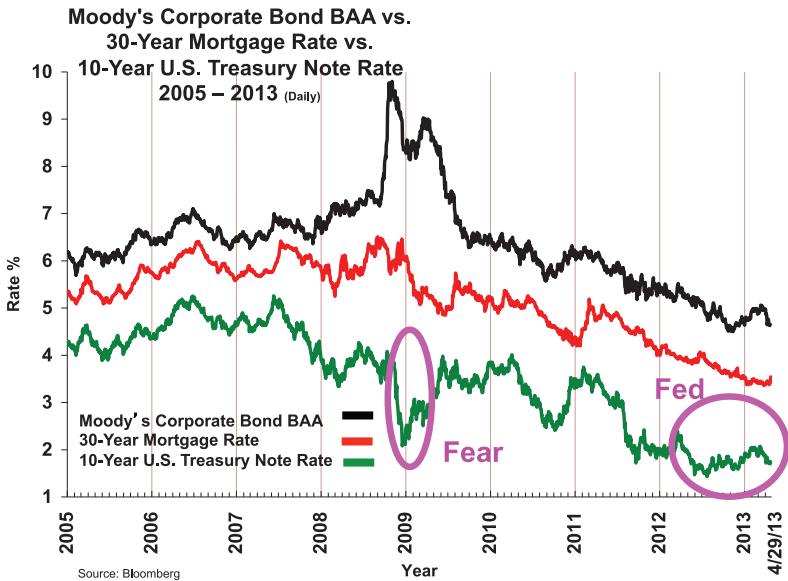


Figure 15 displays the BAA Corporate Bond rate (black), the 30-year Mortgage rate (red), and the 10-year Treasury Note (green).

Until the beginning of 2008, the three plots tracked together. Historically, the BAA Corporate Bond rate and the 10-year Treasury rate have traded at a 2% spread. The 30-year fixed Mortgage rate generally sits in the middle at about 1% above the 10-year U.S. Treasuries (the benchmark for long-term lending.)

When the financial panic took hold in 2008-09, Treasury rates came down because people feared owning anything but Treasuries, and corporate bond rates ran up. (At that time, we bought a number of corporate bonds and bond funds and owned them until the spreads got back down to near normal.) Once the panic was over, Treasury rates came back to 3%+ and stayed there for a bit. Then, the Fed commenced with Quantitative Easing, engineering the decline in Treasury yields.

At this point, interest rates won't go much lower—the Fed has run out of room.

Figure 16 Assets on the Fed Balance Sheet, April 24, 2013

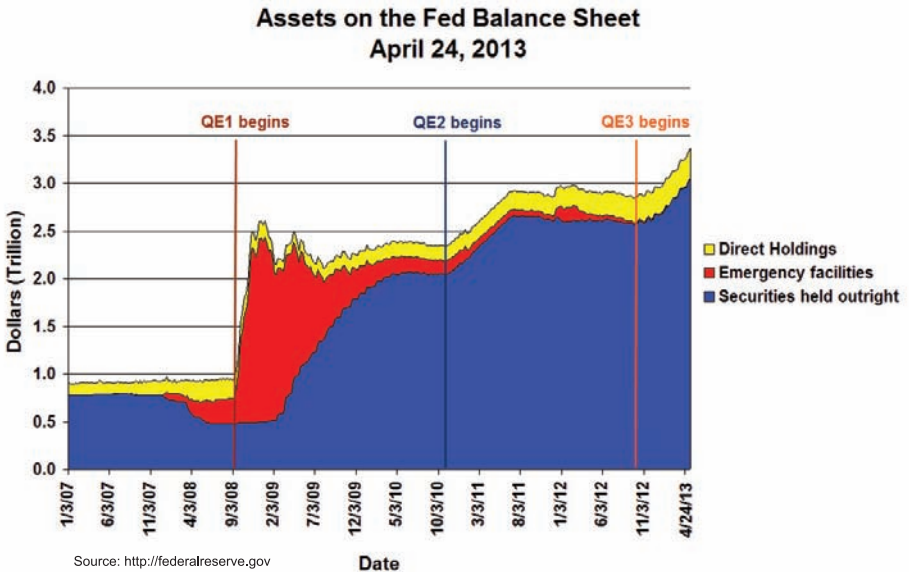


Figure 16 shows the stages of the Fed's Quantitative Easing (QE)—efforts to keep interest rates low in order to stimulate borrowing, spending, and investing:

- QE 1: From December 2008 to March 2010, the Fed bought \$1.7 trillion of mortgage-backed securities to drive interest rates down.
- QE 2: From November 2010 to June 2011, the Fed purchased an additional \$600 billion in Treasuries.
- On September 20, 2011, the Fed announced "Operation Twist." In an effort to keep interest rates low for a longer period of time, Operation Twist involves the selling of short-term Treasuries and the buying of 10-year Treasuries and longer-term bonds.
- QE 3: On September 13, 2012, the Fed announced it would purchase \$85 billion worth of mortgage-backed securities and Treasuries every month until unemployment declines to a reasonable level. (It didn't define "reasonable.")

Folks, there are some months when the Fed buys more Treasury Bonds than the Treasury is issuing!

When all of this changes, I don't know. I do know there are huge political pressures for keeping interest rates low. Yet every retiree in the country that I speak to wants to see rates go up! For every pension plan, it would make things simpler. But the federal government is the biggest borrower in the country—and high inflation and low interest rates help the borrower and hurt the saver.

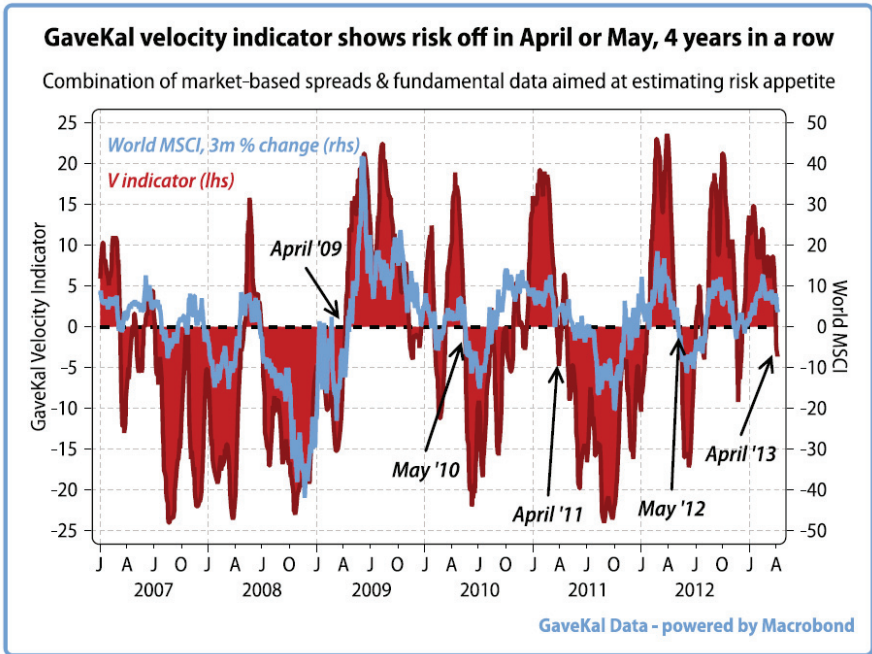
You may ask "How did all of this get started—and why?"

Starting in late 2008 and early 2009, with the realization of bad loans in mortgage securities, compounded by mark-to-market accounting, banks became fearful of lending to each other and the financial markets shut down. As an example, companies could not get a letter of credit—which have been in place since the days of Christopher Columbus! Let's say the velocity (turnover) of money was cut in half...

Your goal as head of the Federal Reserve or as Treasury Secretary is to not let the quantity of goods get cut in half, or the prices of goods to get cut in half, or the combination of the two to get cut in half. To do this, if the velocity of money is cut in half, you have to double the money supply. The TARP (Troubled Asset Relief Program) money that the U.S. Treasury shoveled into banks was to offset the collapse in velocity. It's very likely we would have had a serious depression, or serious deflation, had the federal government not acted.

Has the velocity of money turned positive?

Figure 17 GaveKal Velocity Indicator



The MSCI World is a stock market index of over 6,000 'world' stocks. It is maintained by MSCI Inc., formerly Morgan Stanley Capital International, and is often used as a common benchmark for 'world' or 'global' stock funds.

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While Figure 17 shows a recent decline in the velocity of money, the overall pattern is quite volatile. The number is imprecise and is derived from other numbers, not measured directly.

To understand the velocity of money more thoroughly, I'm going to give a little bit of Economics 101:

We referenced GDP at the beginning of our discussion. GDP is the quantity of goods produced, times the price of goods produced. But you can also equate GDP to the amount of money in use, times the rate at which it turns over. The rate at which money turns over is a theoretical construct called "velocity."

In other words: $GDP = Price \times Quantity = Money \times Velocity$. What we're trying to achieve is a greater quantity of goods per capita at stable prices. The Federal Reserve attempts to manage this process, but it's not an easy task. Velocity is a function of all the turnover and leverage that goes on in the economy by a whole lot of operators—and no party controls it.

Technically, the Fed did not lose control of the money supply over the past several years, but it lost control of the combination; i.e. money x velocity (MV). When the Fed was trying to squeeze the economy in 2004-05 by raising rates, the velocity of money kept growing and overwhelmed the Fed's actions.

The Big Squeeze: Observations on Consumer Spending

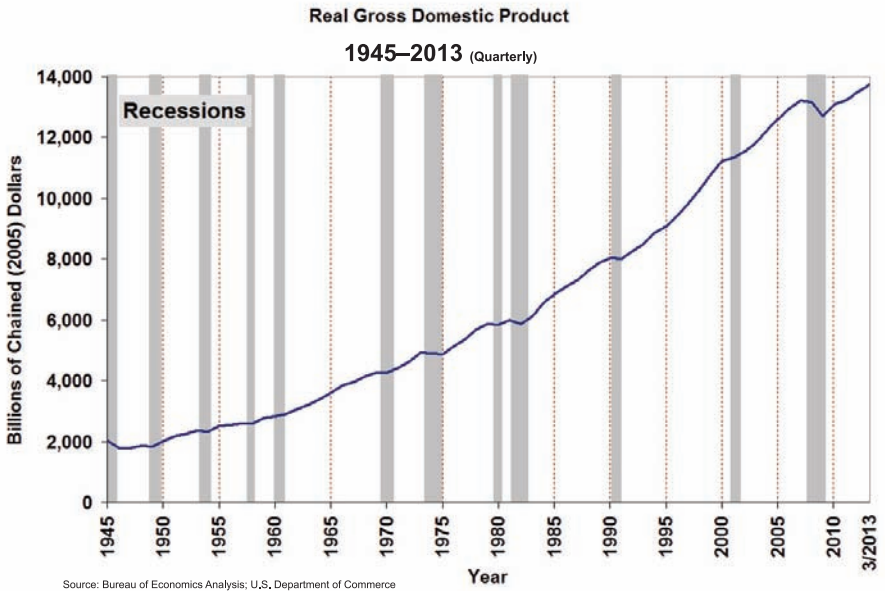
When I was at a "Money Show" earlier in May, I asked the audience: "How many people think the recession is over?" About 30% responded they thought we were still in a recession.

You've heard me say over the years that there are at least three points of view regarding a recession:

1. For an economist, the definition of recession is two consecutive quarters of negative GDP. As a result, an economist won't acknowledge the end of a recession until well after the fact.
2. For the media, a recession isn't over until everybody that lost a job has a new one, GDP's back above where it was, and unemployment's below where it was.
3. For investors, if you wait until you get confirmation that a recession is over, you've missed most of the up-move. (If you are trying to be a successful investor, do not let an economist or the media set your agenda.)

One reason people may feel like we're still in a recession is because Real GDP has not reached the prior high...

Figure 18 Real Gross Domestic Product, 1945-2013



Source: Bureau of Economic Analysis; U.S. Department of Commerce

NOTE: In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period covered and is therefore subject to less distortion over time.

Recessions shown on Figure 18 are determined using the economist's definition. As you can see, Real GDP has gone from \$2 trillion to over \$13 trillion over a 65-year period. If they weren't all highlighted in gray, many of the recessions would be difficult to find on this plot. You can spot a bit of a decline back in 1973-74, along with another in 1980-82. The 2008-09 recession, however, is one that we are able to find with no problem. The decline in GDP during 2008-09 is the largest on the chart.

I think of recessions and expansions the same way my father thought of farming: as a cycle—something that comes around on a regular basis. Anything that occurs twelve times over a 65-year period, I tend to think of as a cyclical pattern. I've also come to think of recessions as necessary—they are needed to rid the economy of excesses built up during its expansion; i.e. excess inventory, unprofitable businesses, and unserviceable debt. I also think that recessions are generally self-correcting. During a normal cyclical recession, people tend to work a little harder, spend a little less, and save a little more, and the economy tends to heal itself.

How's the consumer doing in terms of savings?

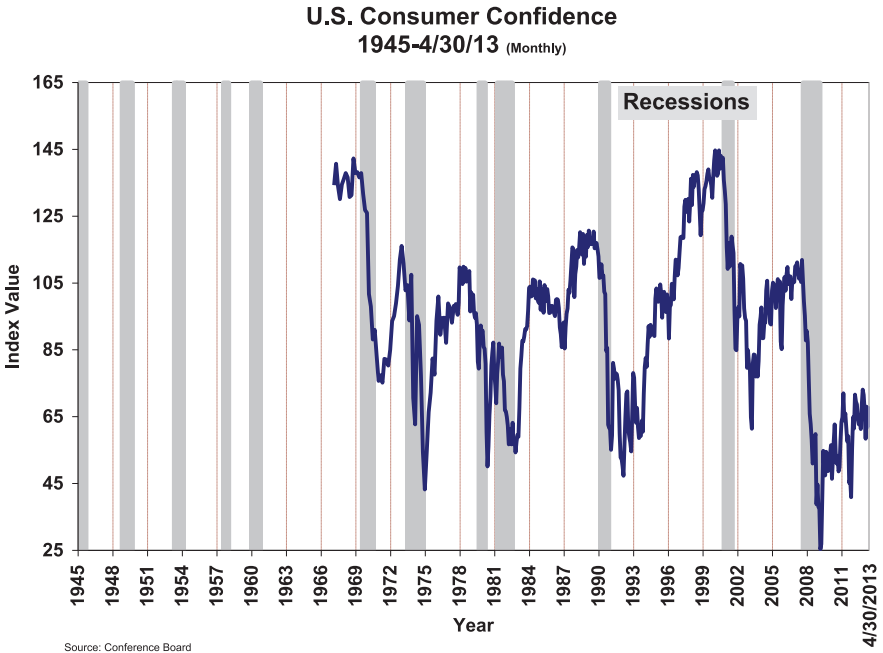
Figure 19 U.S. Personal Savings Rate, Percent of Disposable Personal Income, 1995-3/31/2013



In the 1995-98 period, the personal savings rate was 5 percent. From about 2001-07, we got down in the range of 1%-2 percent. In the fourth quarter of 2008, personal savings went from 1% up to 5%-6 percent. So people started saving 5% more, spending 5% less. Since then, it has gradually worked its way down 2½ percent.

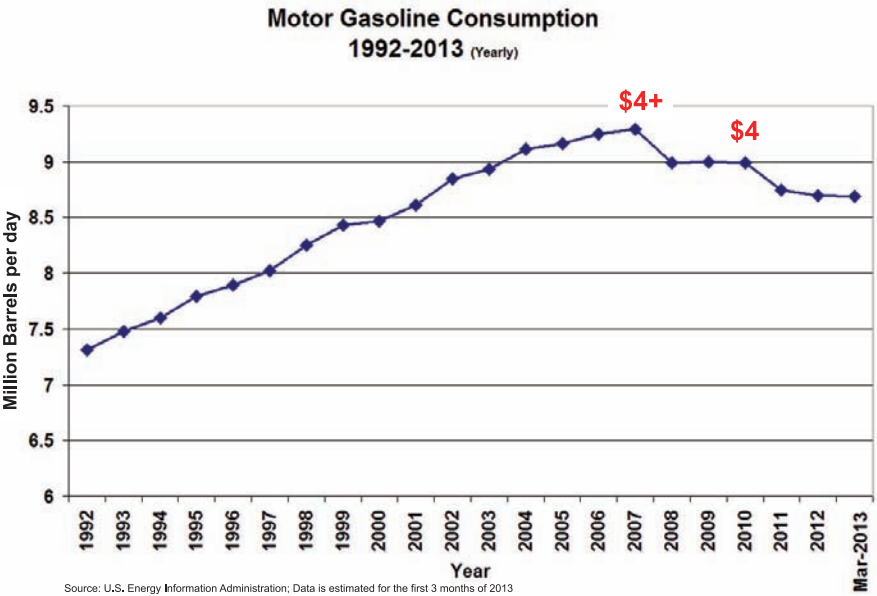
Worth noting: Some of you may be familiar with our work on consumer spending. Over the past 50 years, in the U.S., as a percentage of income, what we spend on food has dropped from 28% to 14%; what we spend on clothing has gone from 10% to 4 percent. If you add those two categories together, what we spend on food and clothing went from 38% to 18%, leaving 20% of our income to spend on something else. That 20% went to spending on healthcare, Social Security, leisure activities (e.g. trips to Las Vegas), and financial services. Now, a greater portion of it is going into savings.

Figure 20 U.S. Consumer Confidence, 1945-4/30/13



The media reports that Consumer Confidence is higher than it was five years ago. That's correct—but as you can see from Figure 20, it's still at recessionary levels.

Figure 21 Motor Gasoline Consumption, 1992-2013

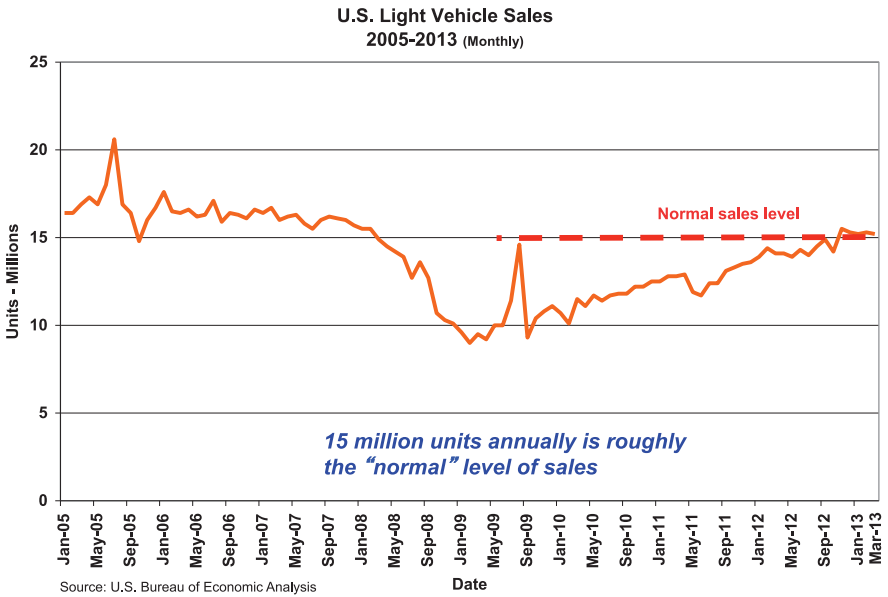


Coming into this recession, it's my observation that what turned the public negative was the price of gasoline at \$4.00 per gallon.

In June 2008, the price of crude oil was \$145 per barrel. There are 42 gallons of crude in a barrel. \$145 divided by 42 gallons is \$3.45 per gallon. Add \$0.70 for expenses and taxes, and the cost of gasoline is \$4.15 per gallon. When it got to \$4.00 per gallon, people started driving less.

As you can see from Figure 21, gasoline consumption is down about 5% from a year ago. Historically, this is very unusual; the usage of gasoline on an annual basis had been going up for at least 50 years. The change may be attributed to people driving less, or to driving more fuel-efficient cars, or to some combination.

Figure 22 U.S. Light Vehicle Sales, 2005-2013

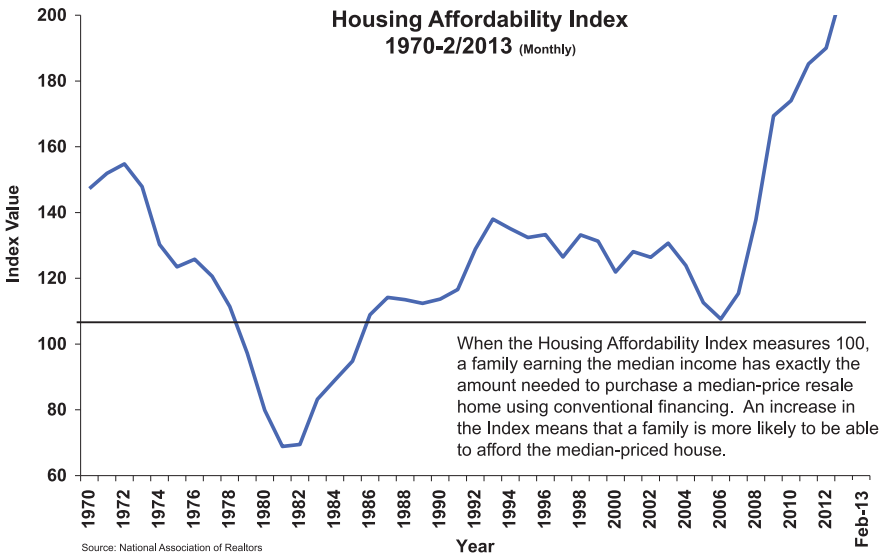


People are gradually buying cars.

As you can see from Figure 22, light vehicle sales were running a little over 16 million on an annual basis. In 2008, sales dropped down to 10 million, and have gradually worked their way back (15 million) to what we think is a near normal level. Recently, however, I came across research stating that light vehicle sales will reach 18 million on an annual basis by 2018.

Incidentally, the average car on the road today is 10.8 years old, up from 8.0 years about five years ago. So our cars are better, our roads are better, and we're driving them longer, so the replacement cycle has been stretched.

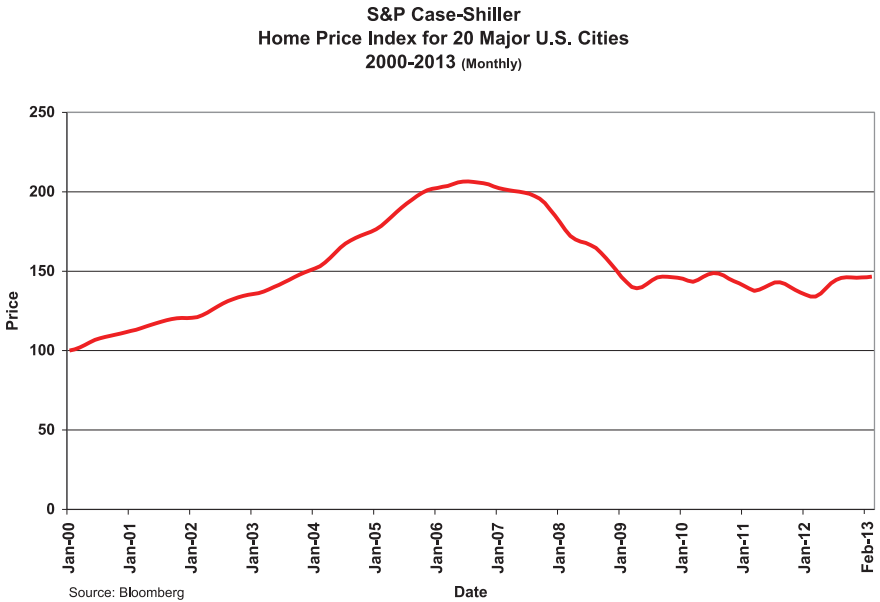
Figure 23 Housing Affordability Index, 1970-2/2013



In Figure 23, the higher the line goes, the more affordable housing is; i.e. owning a house is cheaper relative to our income.

Remember back in 1981 when mortgage rates were 13%, 14%, and 15 percent? Housing was unaffordable. When mortgage rates were on the order of 6% or 7%, however, house prices were moving up as people bid them up—beyond what they should have been. As a result, affordability came down in '05, '06, and '07. Today, it's the best it has been in over 40 years, at least since 1970 when the numbers were first tracked.

Figure 24 S&P Case-Shiller Home Price Index for 20 Major U.S. Cities, 2000-2013

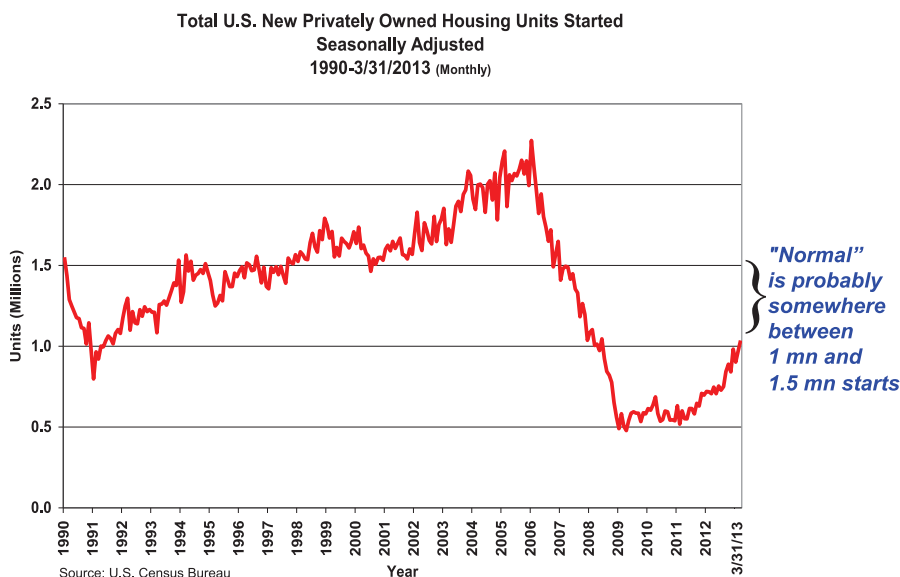


The S&P Case-Shiller Home Index tracks changes in the value of residential real estate for 20 major cities.

As you can see from Figure 24, house prices peaked in roughly 2007. During the 2008-09 recession, prices went down on an Index scale from about 200 to 150—about 25 percent. Since then, house prices have been fairly flat, but are beginning to increase.

For the last decade or so, we've been seeing people buying houses based on desire, not need. It was based on what people thought they could pay for—and the belief that buying a house was a good investment. If you argue that we are currently producing houses and cars below replacement levels, (which we are), then at some point there should be a rebound, but the rebound may not look the same as it did before. If people start buying 1,800 square foot houses instead of 2,400 square foot houses, or if they start buying small cars instead of luxury cars, that gives a different flavor and a different profitability to the industry going forward. Will people continue to “up size” two or three years from now, or will they say “we’ve got enough already”? That I simply don’t know, but there usually comes a point when one is basically satisfied.

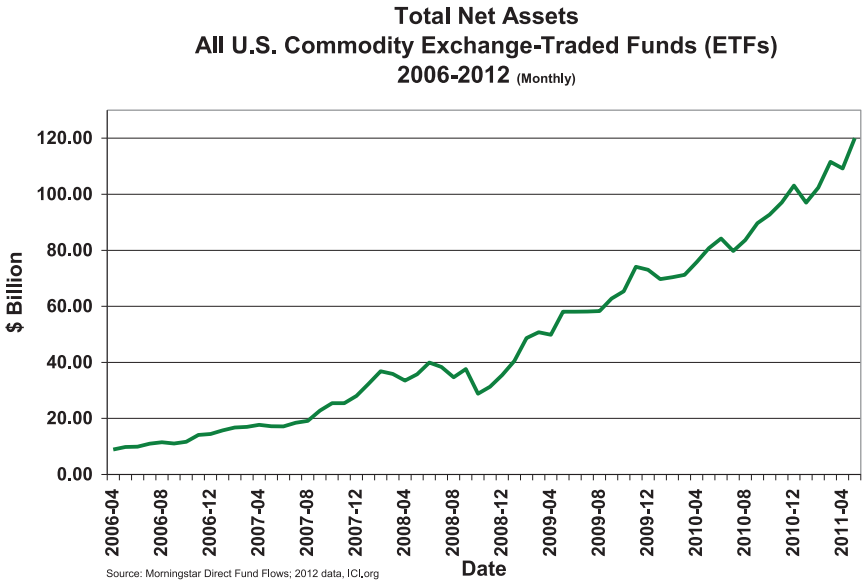
Figure 25 Total U.S. New Privately Owned Housing Units Started Seasonally Adjusted, 1990-3/31/2013



As Figure 25 indicates, housing starts have been at a very low level—unsustainably low for a couple of years. During 2012, housing starts began to work their way back. At some point we think they'll be back between 1 million-1½ million starts per year.

Of the money the Fed is introducing into the economy through its Quantitative Easing, we know there's not much going into consumer spending—autos or housing. Some of the money may be going into foreign markets, some may be going into the U.S. equity markets, and some is likely going into commodities. Think of it this way: If you are an investor and you sold \$100,000 of Treasuries, what would you do with the money? Invest in the U.S. stock market? Buy a house? A car? Gold?

Figure 26 Total Net Assets All U.S. Commodity Exchange-Traded Funds (ETFs), 2006-2012



Commodity ETFs have made it very easy to own gold and precious metals. Ten, fifteen years ago, if you wanted to own gold or other precious metals, you'd have to actually buy them. But ETFs allow you to take a position in gold without actually owning the physical commodity. As a result, the question that has recently surfaced is: If you buy an ETF that represents a precious metal, do you actually own that metal or not? Some do; some don't. Wall Street has created ETF synthetic instruments that represent commodities (and a whole host of other asset classes), but not the actual physical material.

As you can see from Figure 26, assets in U.S. Commodity ETFs have increased from \$10 billion to \$120 billion, mostly in the last four years. Once again, I believe this can be attributed to low interest rates.

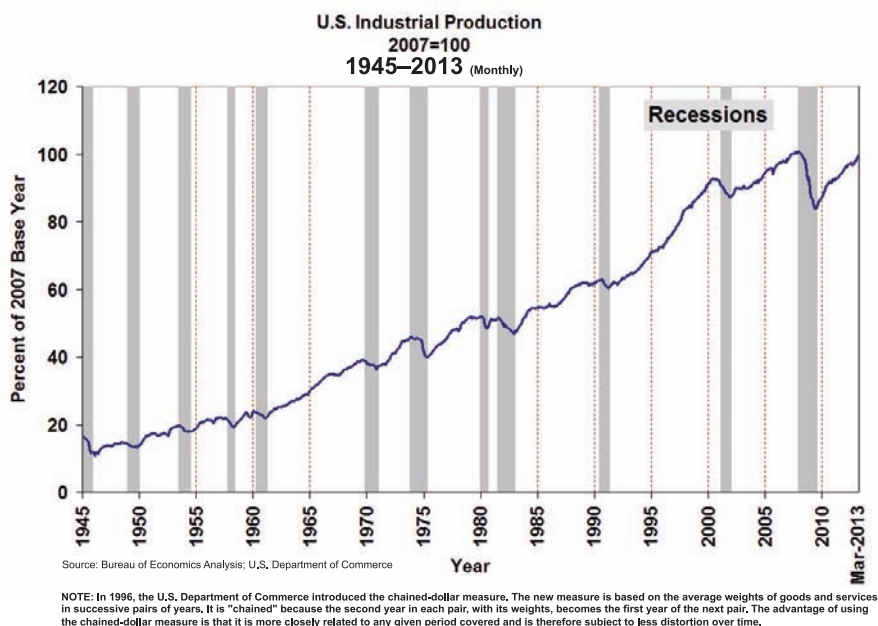
We believe any incremental investment would have helped to drive commodity prices up; likewise, any incremental outflow would have helped to drive prices down. I believe that over time prices gravitate towards economic value. Over short periods of time, however, these money flows do have an effect. (In any asset class—I don't care if it is baseball cards, farmland, growth stocks, or commodities—as long as new money is coming into the game, prices move up. When new money stops moving in, it plateaus; when money starts moving out, it reverses.)

While we're on the subject of gold/precious metals, some investors use these assets as hedges against inflation, but our belief is that gold is "half religion." We would much rather own Intel or Microsoft—companies with strong free cash flow—based on the price we're paying. Gold has no free cash flow; therefore, as an economic quantity, it's hard to value. (Most investments are valued by calculating the present value of future cash flows. This method is not useful in valuing gold as the only future cash flow is the sale sometime in the future.)

The Big Squeeze: Observations on Businesses' Response

Figure 27 shows that each time we have a recession there is a decline in Industrial Production:

Figure 27 U.S. Industrial Production, 1945–2013



As you can see from this plot, Industrial Production, on a nominal basis, is approaching where it was six years ago. Note, however, that this plot is not adjusted for inflation, which now averages about 2% per year.

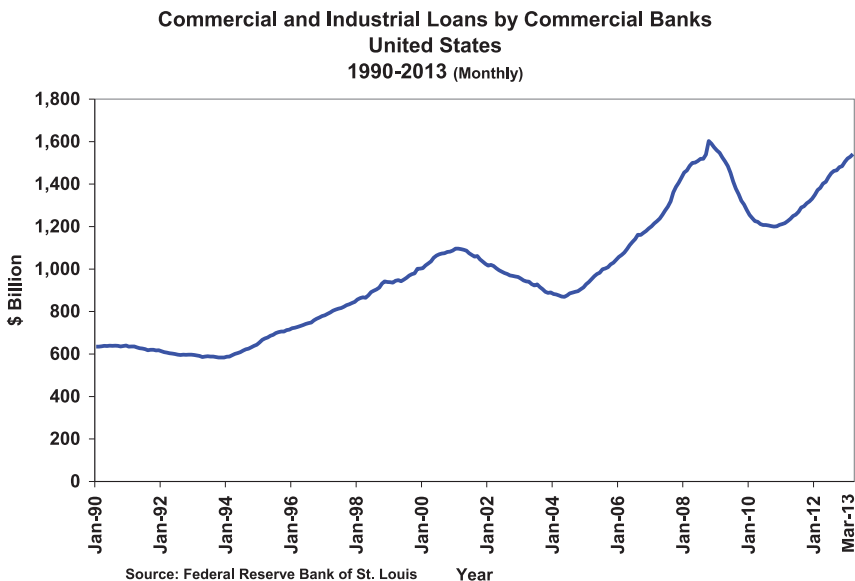
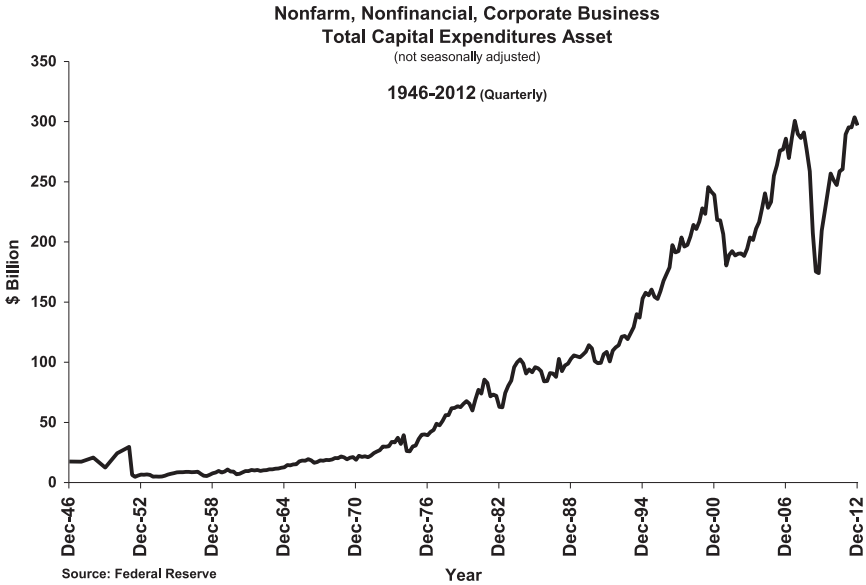
Figure 28 Commercial and Industrial Loans by Commercial Banks, 1990-2013

Figure 28 indicates that we're starting to see some pick-up in commercial and industrial loans. This is one of the triggers that tell us velocity (the turnover of money) is picking up, so we're beginning to be concerned about inflation.

What we can't differentiate is whether companies are borrowing to build more plants, or borrowing to buy in their own stock. What we find interesting is that if the economy were strong, you'd want to own a company that had enough confidence in the future to build new plants, to be prepared for more growth. Well, a couple of months ago, Intel announced it was building a new plant and it drove the stock down. At this point, it seems that if you announce you are borrowing money to buy in your own stock, the market drives the stock up. But, if you start betting on the future, (at Intel, those are not stupid people—they're making a big bet on the future), the market drives the stock down.

Nearly everything in economics is "today versus tomorrow." Today, the markets are paying for today and, frankly, they are discounting tomorrow. We've been saying for five years that businesses will be reluctant to bet on the future because no one knows what the rules (on taxes and regulations) are or will be. So we monitor things carefully to try to be as close as we can to the changes.

Figure 29 Nonfarm, Nonfinancial, Corporate Business Total Capital Expenditures Asset, 1946-2012



The impact of the 2008-09 recession on businesses was unusual. The seizure in lending in late 2008 affected the way businesses operate. Where they once relied on banks to supply short-term loans, they were spooked by the troubles in the banks and the virtual destruction of the market for commercial paper. Some businesses also saw their end markets stop growing for a period of time as consumers shifted to saving 4%-5% of their income.

As you can see from Figure 29, everything fell off a cliff during the fourth quarter of 2008. Since then, capital expenditures are growing at a measured rate, almost back to pre-recession levels, but this is on a nominal basis—not adjusted for inflation.

What hasn't come back is employment.

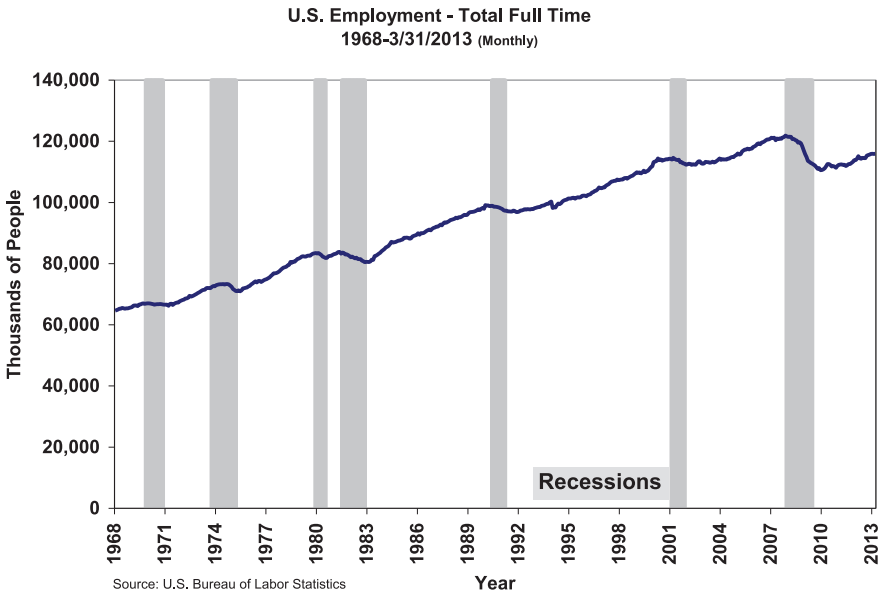
Figure 30 U.S. Employment – Total Full Time, 1968-3/31/2013

Figure 30 shows a considerable drop in employment during the 2008-09 recession, and that employment has not bounced back. One reason employment has not been significantly improving is because the step-down in consumer spending in late 2008 has been followed by only 2½%-3% annual growth. If the population grows at 1%, and productivity grows at 2%, our economy must grow by 3% per year just for employment to stay flat. Because the economy is currently growing about as fast as productivity is growing, businesses don't need to hire additional people or open new plants.

You've heard me say that businesses continue to run lean and to husband cash. If they are not hiring or spending to expand their operations, what are they doing with the money? Many companies are buying in their own stock. Some are paying out dividends, some are stockpiling cash, and some are buying other companies. The reason companies are doing this, rather than hiring or building, is because capacity utilization is at 78 percent. During the 2008-09 recession, capacity utilization dropped to 67 percent. Companies won't need to hire or add capacity until utilization gets well north of 80 percent.

Returning to Figure 30, in 2006-07, we were adding somewhere around 100,000-200,000 people per month to the employment tracks. During the 2008-09 recession, those numbers fell dramatically. After March 2010, it appears hiring was starting to pick up a bit, but remains at a moderate pace. One reason may be the Patient Protection and Affordable Care Act ("Obamacare") which Congress passed on March 23, 2010.

Some of you have heard me say that I think we're in the second great economic experiment of my adult lifetime. The first great economic experiment of my adult lifetime took place in the 1980s. Back in the 1970s, we were told the U.S. economy was a mature economy, so, of course, it was growing slower than others. Recall, too, that we had high inflation—and were told it was intractable. The combination was termed "stagflation." Then, we had a couple guys come along by the names of Volcker and Reagan who proved that all of it was due to bad policies. Volcker demonstrated that inflation was a result of printing too much money. Reagan demonstrated that lowering the marginal income tax rate from 70% to 28% made it worthwhile for employers to hire people and unemployment fell.

This time around, we're trying to help the employees, but we're penalizing employers. Unemployment across the U.S. is at 7.6 percent. As an employer myself, I don't know what taxes will be a couple years from now, but I'm quite confident they'll be higher than they are today. Further, I don't know what the regulations will be, but we continue to receive 20-page missives outlining new regulations—and my business is pretty well regulated to start with! Adding to the quagmire is our Company's healthcare insurance bill, which recently increased by 20 percent.

We believe increasing taxes, increasing regulations, and the increasing cost of health insurance all contribute to the "big squeeze" on businesses, making it difficult for employers to hire.

How low interest rates impact companies' defined benefit pension plans

Jeff Muhlenkamp delivered this segment of the seminar.

Low interest rates are adding to the challenges for companies with defined benefit pension plans. Specifically, companies must build up assets to face liabilities in the future.

As a primer, when a company thinks about its defined benefit pension plan, the value of future liabilities must be translated into present-day (liability) values for a comparison against present-day asset values. This allows management to assess if the defined benefit pension plan is underfunded or overfunded. In order to make that calculation, management has to make some assumptions:

1. What are the amounts and timing of the payouts?
2. What discount rate should be used to translate future liabilities into present-day liabilities?
3. What is the rate at which assets are expected to grow?

Let's walk through a make-believe example:

Let's say our imaginary company has one employee and we expect him to retire in 20 years—and we expect to pay him a pension for a period of 20 years of \$3,000 per month. The total cash distribution is \$720,000 (\$36,000 per year for 20 years). If we discount that amount back to today using a 9% rate, the present-day liability is \$55,487. Using a 7% discount rate, the present liability is \$95,808. Using a 4% discount rate, the present value of that future liability is \$222,743.

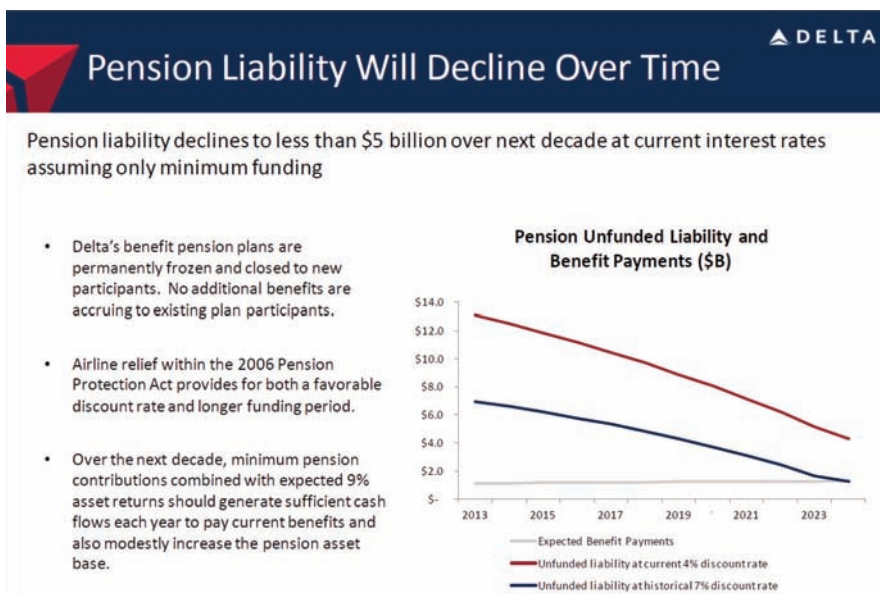
To meet that future liability using a 9% discount rate, our imaginary company would have to set aside \$55,487 today to have a fully funded pension plan. If we assume only a 4% discount rate, our imaginary company would have to set aside \$222,743 in order to fully fund its pension. ...Already you are getting an idea of just how important the discount rate assumption is!

With this as a background, let's look at what is happening with some companies that have large defined benefit pensions.

Delta Airlines

The following slides ("Figures") are from a Delta Airlines investor presentation given on May 8, 2013.

Figure 31 Pension Liability Will Decline Over Time



Delta investor presentation given on 8 May 2013

The first thing you'll notice from Figure 31 is that Delta Airlines has frozen its defined benefit pension plans. (More often, this is the first step companies take to come to grips with future pension liabilities.)

On the plot, the red line indicates Delta's unfunded pension liability at a 4% discount rate, which is \$13.3 billion. (For comparison, Delta's market capitalization is \$15.5 billion, so the company's pension shortfall is 85% of the market value of the company.)

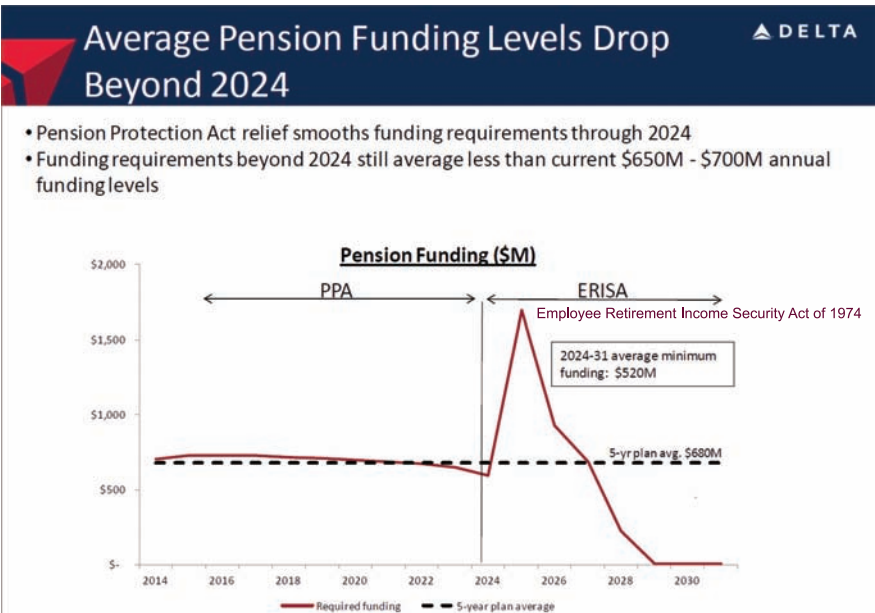
The blue line on the plot is the unfunded pension liability using a 7% discount rate, which Delta considers as the historical discount rate. At a 7% discount rate, the shortfall is roughly \$7 billion, about half of the shortfall at a 4% discount rate.

Delta’s strategy for addressing the shortfall is given in the third paragraph on Figure 31: “Over the next decade, minimum pension contributions combined with **expected 9% asset returns** should generate sufficient cash flows each year to pay current benefits and also modestly increase the pension asset base.” (The “minimum pension contributions” referenced by Delta are the minimum required by law.)

Notice that Delta is assuming a return on its pension assets above the historical discount rate—and far above the yields available in investment-grade bonds. So, Delta’s pension fund asset allocation is going to be looking for high-return investments to meet a 9% return assumption.

The next two Figures demonstrate the impact of federal legislation on minimum pension funding and what Delta is doing about it.

Figure 32 Average Pension Funding Levels Drop Beyond 2024

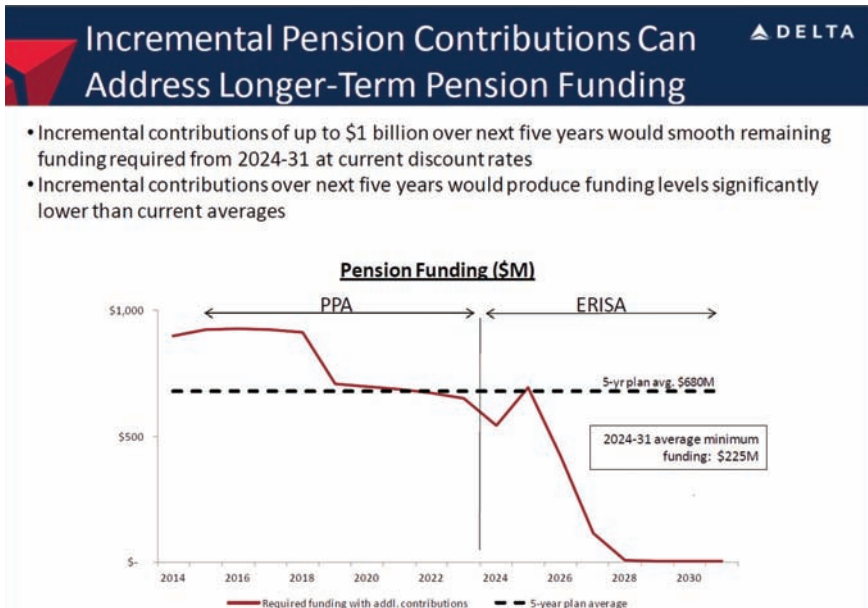


Slide taken from Delta investor presentation given on 8 May 2013

Figure 32 illustrates the payments Delta Airlines is required to make in order to fund its pension going forward. The minimum payments are governed by the Pension Protection Act of 2006 until 2024, at which point they are governed by the Employee Retirement Income Security Act of 1974 (ERISA). The change in 2024 generates a huge spike in the required contribution—and Delta doesn’t like that spike.

Figure 33 shows how Delta intends to deal with this change:

Figure 33 Incremental Pension Contributions Can Address Longer-Term Pension Funding



Slide taken from Delta investor presentation given on 8 May 2013

For the next 3-4 years, Delta's intent is to voluntarily contribute more to its pension than is required by law in order to avoid a very large call on its cash in 2024.

Depending on the discount rate used, Delta's pension plan is short between 45% and 85% the market value of the company. Delta assumes it can grow the existing pension assets at 9% to minimize as much as possible the cash it must contribute annually to the pension plan. That assumption will influence Delta's pension plan asset allocation in the near term (which wasn't addressed in the May 8 presentation), because investment-grade bonds won't generate 9% in returns right now.

In order to smooth a contribution spike in 2024, Delta is contributing up to \$1 billion more than required by law over the next five years. That's \$1 billion in cash that won't be used to improve the business or be returned to shareholders. If the discount rate falls, the numbers get worse.

Now, let's look at Goodyear Tire to see how declining discount rates impact a company.

Goodyear Tire

The following slides ("Figures") are taken from Goodyear's fourth quarter 2012 earnings presentation. In a few places, I've added information which I'll highlight for you.

Figure 34 Pension Challenge – Summary



Pension Challenge – Summary

- **Continuing strategy to eliminate defined benefit pension plans**
 - No new entrants to U.S. plans
 - No added service for salaried workforce
- **Have made contributions of nearly \$1.4 billion to U.S. plans over last 5 years**
- **Contributions more than offset by discount rate reductions**
 - Down nearly 250 basis points in 5 years **6.25% in 2007, 3.71% in 2012**
- **Need to eliminate this ongoing risk**
- **Plan to pre-fund U.S. plans once they are frozen**
- **As funded levels increase, asset allocation will be matched to bonds used to determine plan's discount rate**
 - Essentially eliminates exposure to interest rates and equity markets
- **At beginning of 2013, hedging program implemented to reduce plan volatility in advance of completing actions described above**

Taken from 4th Quarter 2012 earnings presentation

The first thing you'll note from Figure 34 is the same action taken by Delta Airlines: Goodyear Tire's defined benefit pension plan is frozen.

The second thing you'll note is that Goodyear has been battling its pension shortfall for five years, making nearly \$1.4 billion in contributions over that period. In spite of this effort, little to no headway has been made because Goodyear's discount rate dropped by 2½%, going from 6.25% in 2007 to 3.71% in 2012.

Goodyear is concerned that, going forward, the discount rate will continue to drop and there will be additional calls on its cash. As a result, Goodyear plans to pre-fund the frozen U.S. plans and place the funds in duration-matched bonds, thereby offsetting the risk of changes in the discount rate.

Let me highlight what Goodyear is doing: In order to reduce the future variability of payments to its pension plan, Goodyear is going to invest nearly all of the pension's assets into duration-matched bonds. (Like Delta, Goodyear is paying up to reduce future variability.) Since we view bond prices as being at an historic peak, we believe this is probably the exact wrong time to buy bonds and that Goodyear will be paying a higher price than it thinks to reduce the "risk."

Figure 35 shows how Goodyear's pension shortfall has grown over time:

Figure 35 U.S. Pension Plans

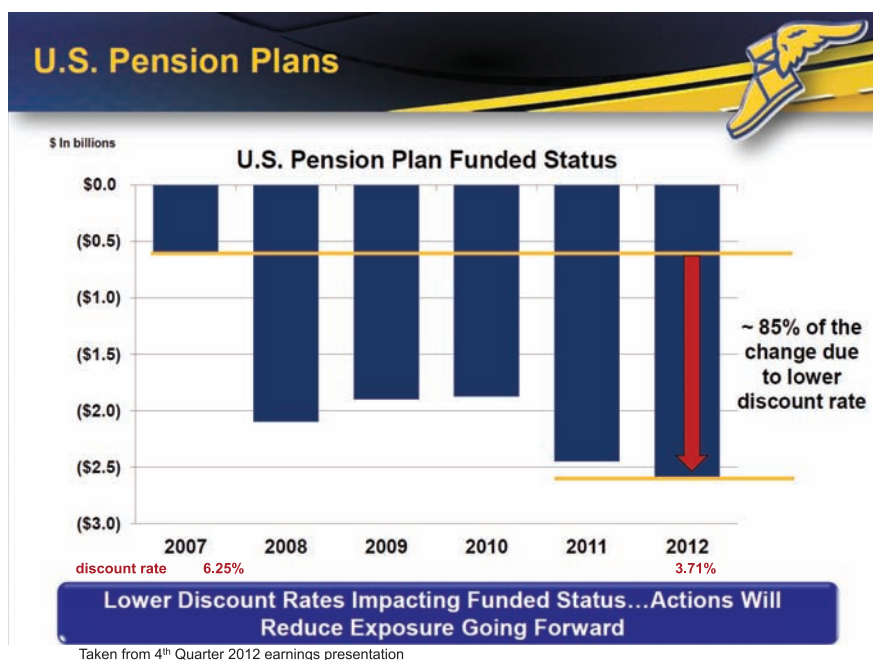


Figure 35 presents the unfunded status of Goodyear's U.S. pension plans going back to 2007.

In 2007, the pension shortfall was \$600 million. Currently (2012), the shortage is \$2.6 billion, while the company's market capitalization is only \$2.7 billion!

Goodyear stated that the 85% change in the unfunded pension plans was caused by a lower discount rate—that's how it (like Delta Airlines) is being squeezed by lower interest rates! Interest rates drive the discount rate, which, in turn, drives cash flows into pensions.

Figure 36 U.S. Pension Plans Unfunded Position Year Ended 2011 vs. 2012

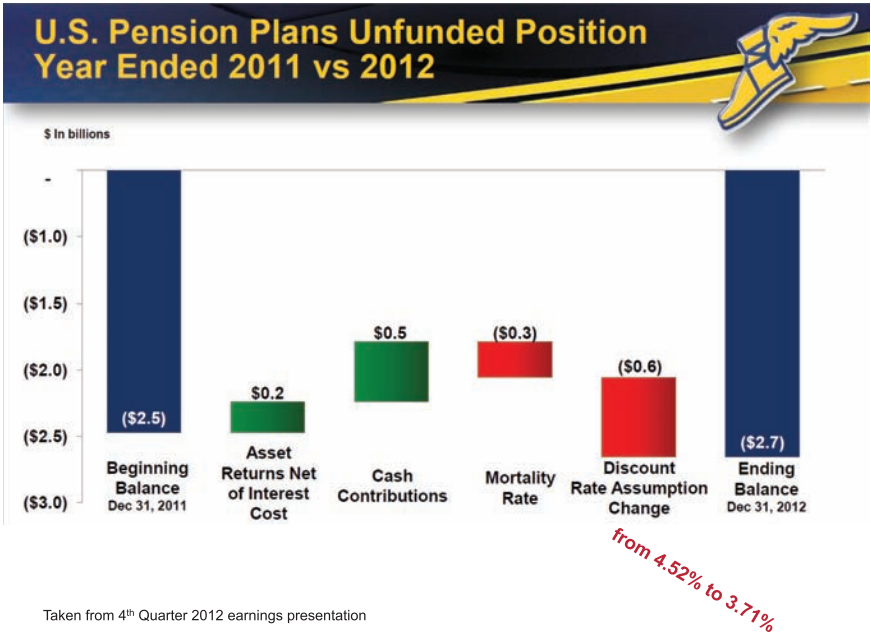
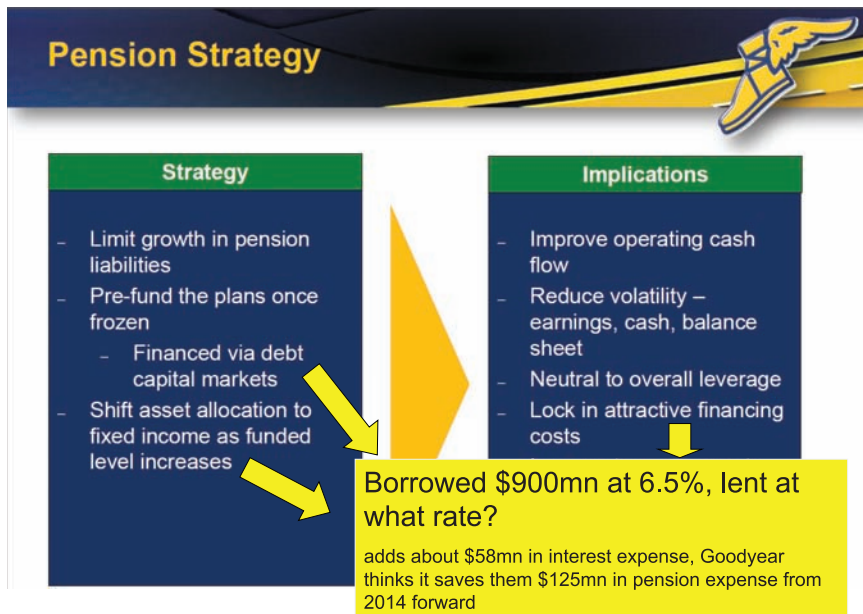


Figure 36 presents what happened to Goodyear's unfunded pension position from January-December 2012.

The beginning balance was short \$2.5 billion—which improved by \$200 million with higher-than-expected returns on its assets. After contributing \$500 million, the plans lost ground due to a change in the mortality rate forecast. The plans lost more ground due to a decrease in the discount rate (going from 4.25% to 3.71 percent). At the end of the year, the pension was in worse shape than what it was at the beginning of the year, despite contributing \$500 million.

Figure 37 presents a summary of Goodyear's pension strategy:

Figure 37 Pension Strategy



Taken from 4th Quarter 2012 earnings presentation, yellow box and arrows added by Muhlenkamp

Reminder: These slides were produced by Goodyear in December of 2012. Following through on its plan to remove the “risk” from its pension, in March 2013, Goodyear borrowed \$900 million at 6.5%, which it plans to invest in bonds. (Goodyear does not have the luxury of borrowing cheaply; it is not a high-quality company.) Frankly, we don’t see how Goodyear is going to achieve a return in bonds that is better than the 6½% rate at which it borrowed. In our opinion, Goodyear is borrowing dear and lending more cheaply, making its risk reduction strategy very expensive.

To summarize what’s happened to Goodyear: A declining discount rate, driven by declining interest rates, has increased the present value of future pension liabilities faster than Goodyear has been able to contribute cash to the plan. To “de-risk” the plan, Goodyear borrowed \$900 million at 6.5% and will invest this amount in bonds. The annual increase in interest expense is \$58 million. Goodyear forecast it will save \$125 million in pension expense from 2014 forward.

What have we learned by looking at Delta Airlines and Goodyear Tire?

1. Declining interest rates have driven the discount rate down, reducing the returns companies can expect on assets. Today, that means that companies are no longer offering defined benefit plans. (It wouldn't surprise us that, by the time this cycle of interest rate decline finishes, the only place you'll find a defined benefit plan is with the government.)
2. Companies are contributing more cash to their pensions. In Goodyear's case, it is leveraging the balance sheet to do so. Such companies are not able to invest that cash in infrastructure or return it to shareholders. Delta and Goodyear are not only contributing more cash to their pensions to meet future liabilities, they are contributing above the minimum requirements to reduce the variability ("risk") of future contributions.

As investors we recognize pension liabilities represent a claim on company assets ahead of the equity holder. When the pension liability is large, we have to assess the ability of the company to address the shortfall from its cash flows and the viability of its strategy and assumptions. Some approaches we think will work better than others. If interest rates rise, the math changes and a good strategy for a declining rate environment may not work so well.

For some period of time, it may be that Goodyear Tire looks a bit smarter than Delta Airlines because it has controlled the growth of its pension liability. That said, if interest rates rise, after a period of time, the discount rate should rise. In turn, companies with large pension liabilities should benefit, as the present value of future liabilities declines and claims on cash decline as well. If that happens, what used to be a bit of a headwind—a claim on cash—may reverse and become a tailwind. And, if that happens, we might get an opportunity to pick up some good companies, cheap.

For more about how Muhlenkamp & Company is responding to the squeeze on businesses, I'll turn the podium back over to Ron.

The Big Squeeze: What Muhlenkamp & Company is doing in response

So what are we doing in response? I'm going to start with what we're not doing:

We're not buying bonds. Is that a mystery to anybody? We don't find value in Treasuries.

Remember: The Federal Reserve has purposely driven interest rates below the level of inflation. It's actively buying bonds and mortgage-backed securities, driving prices up and interest rates down. As a result, you can't get decent yields on bonds which are above the status of junk. We find more value in corporate stocks than we do in corporate bonds.

Theoretically—if you want to pick and choose—there are probably some Municipal Bonds (Muni's) that might make sense, but you have to be careful! You all know that Harrisburg (capitol of Pennsylvania) declared bankruptcy. Illinois is bankrupt, and so is California, so make sure there is a reliable income stream behind the Muni bonds. Bottom line: In Muni's, you must do as much homework as we've always had to do in selecting stocks.

In the last year, you could have made a lot of money on Italian bonds and on Spanish bonds. We don't like going that far out on a limb, especially with Europe in a recession. With such a tremendous push for yield, however, it appears people went from T-Bills to T-Bonds to now, Italian and Spanish bonds.

What about real estate?

About three weeks ago, I asked my cousins who are farmers, "At the current price of farmland—and with the current price for corn and soybeans—how long does it take to pay for farmland, if you're raising grain?" They said it can't be done. Maybe if you do dairy; maybe if you do hogs... But the price of farmland has already been bid up to the point where you can't pay for it by growing grain crops.

Where else?

A broker friend of mine told me recently that his clients are looking for "creative sources of yield." The phrase set off alarm bells in my head! Let me tell you why.

Investment securities have different characteristics:

- At the simplest level, cash and cash equivalents (short-term Treasuries, bank CDs, money market funds) are a parking place to protect investors' assets when markets go down, or to have the money available when it is needed.
- Debt instruments (bonds) are designed to protect capital over a period of time, and to provide interest payments in the interim.
- Equity securities (stocks) represent ownership in a company.

A focus on yield or income normally focuses on debt securities. Since 1957, the interest yield on corporate bonds has exceeded the dividend yield on corporate stocks.

Key point: "yield" is generally understood (and I define it) as the interest payment earned on a security over and above the promised return of the principal.

In February and May I attended "Money Shows" in Orlando and Las Vegas. The topic that generated the most interest was: "How can I generate more income from my investments?" One speaker spoke in favor of "royalty trusts," but he used the words "yield" and "payout" interchangeably, as if they were the same thing. They are not—particularly in a royalty trust. A royalty trust is a trust (a pool of investors) which owns the royalty rights on a group of oil or gas wells. As the oil from the wells is produced and sold, the investors in the royalty trust receive their pro-rata shares of the proceeds. When the oil is gone, so are the assets. I think of the oil as being in a warehouse; once you have sold the contents, the warehouse is empty.

But nearly all oil fields produce at a declining rate, with higher rates at the beginning. Let's assume we sell the contents of the warehouse over 20 years, but sell 10% in the first year, declining to 1% in the 20th year. Your proceeds from the first year sales would not be representative of the later years. The speaker's recommendation on the royalty trust (buying the warehouse contents), however, was based largely on the expected "payout" (proceeds) in the first year, which he expected to be over 10 percent. He also stated that most of the payout (which he often spoke of as yield) was "tax sheltered." The reason it is expected to be tax sheltered is that most of the payment is a return of capital—and we are not required to pay taxes on a return of our capital. We are only required to pay taxes on the money earned in excess of our investment.

These are just a couple examples of "creative sources of yield." Be careful out there.

What about investing in China?

As you're probably aware, China had quite a stimulus in 2009, trying to boost its GDP growth back out of the trough. From the following plot, Figure 38, you can see how Real GDP spiked in 2010 and has since decreased:

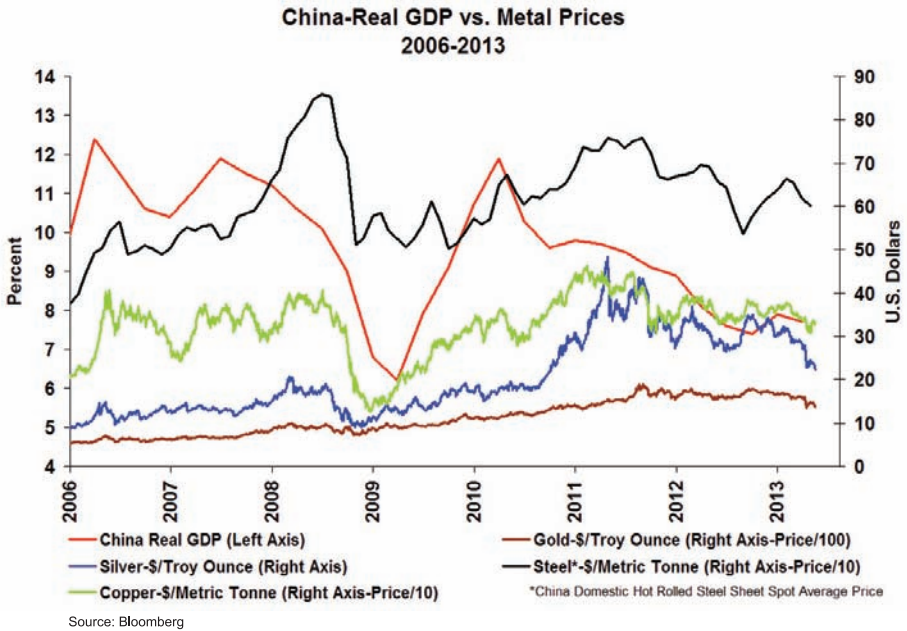
Figure 38 China Real GDP (% Year/Year), 2006-3/31/2013



Real GDP growth is now at 7½%, which, coincidentally, is the Chinese government's goal for growth for this year.

When the increase in Real GDP took place in 2009-11, a lot of stimulus money went into building infrastructure, e.g. airports, roads, and bridges. The Chinese leadership is now shifting from an "infrastructure build-out" growth model to a consumer-led growth model. Doing so will neither be easy nor quick; movement in the new direction has been slow. Meanwhile, we continue to look for companies that meet the needs of the Chinese consumer.

Figure 39 China Real GDP vs. Metal Prices, 2006-2013



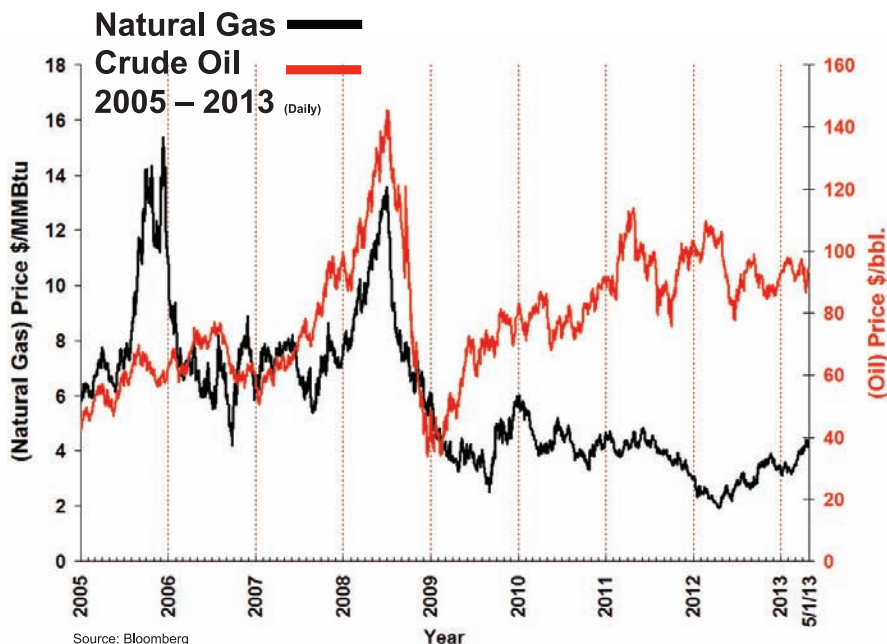
Clearly, Chinese demand for industrial commodities has cooled and, since China had been the growth driver for many materials industries, we think commodities and basic materials will do poorly for a while.

As you can see from Figure 39, when China's Real GDP (red line) was growing, the price of steel ran up (black line), as did the price of copper (green line). In the last two years, has Chinese growth has been slowing, so have steel and copper prices.

To summarize: With China making a push toward more consumer spending and less infrastructure spending, along with Europe slowing down, and the relative strength of U.S. dollar, commodity prices have come down. This applies to all commodities, all the way from steel to copper—basically the hard commodities—and, lately, gold along with that. (Actually, gold has been declining for the past 18 months) As a result, we do not own any material stocks or basic material stocks.

Where are we bullish?

Figure 40 Natural Gas, Crude Oil, 2005-2013



Historically, the relationship between prices for crude oil and natural gas was set by the relative energy density between the two: a ratio of about 8:1.

In this country, a quarter of our natural gas production is used as feedstock by industry, a quarter is used to generate electricity, and half is used for home heating. With a particularly cold winter like the one we experienced in 2005-06, there was a bit of a “gas shortage,” resulting in a spike in natural gas prices relative to crude oil. Prices ran up together again in 2008 and came back down in 2009. Since 2009, the price of crude oil has gone back up—the price of natural gas has not. This is the result of the horizontal drilling and hydraulic fracturing of natural gas in the U.S.

This price spread has had fascinating repercussions that nobody expected. Natural gas prices were tracking at about a \$4 per MMBtu level. Early in 2012, prices got down to \$2 per MMBtu, making natural gas cheaper than coal. As long as the price spread remains wide, we’re going to see a shift in consumption to natural gas.

Also, if you burn natural gas instead of gasoline or coal, you produce about half as much carbon dioxide (CO₂). In moving towards a hydrogen economy, using natural gas gets us halfway there. The chemical formula for gas is CH₄; if you combine CH₄ with oxygen, you get one molecule of CO₂ and you get two molecules of H₂O...water! If you move from using gasoline, oil, or coal, to using natural gas for the same amount of energy, you produce about half of the CO₂.

The long-term result of this energy revolution is lower energy bills for U.S. consumers and businesses. We think the next area of opportunity is in transportation, particularly over-the-road trucking. We've invested in companies that drill for the natural gas and those that service them. We're also invested in companies that modify truck engines to burn natural gas, as well as companies that are building and supplying the fueling stations.

Our stock selection process continues to be "bottom-up" and we remain steadfast in our pursuit of owning good companies at cheap prices. Once we have identified companies that meet our selection criteria, we edit from the "top-down," applying our macroeconomic lens. Here's an example:

We had identified a number of large banks selling at very attractive prices, but had held off purchasing them because of their exposure to European banks. When the Outright Monetary Transactions (OMT) program was announced back in September 2012, we concluded the likelihood of a European banking crisis had receded. We decided it made sense to own the banks we had identified at cheap prices, so we invested. So far, those investments have worked out very well for us.

On another front, advancements in biomedical technology are changing how we provide healthcare in the U.S. While in the early innings, the healthcare industry is evolving from the traditional model of going to the doctor to diagnose our symptoms and treat our illness, toward a model of screening, prevention, and early intervention; i.e. personalized medicine based on one's genetic makeup.

The healthcare industry is getting better at understanding the causes of disease—and using that knowledge to not only improve treatments, but to identify those individuals more at risk.

We've invested in companies that bring innovative genetic testing to the field of medicine, allowing earlier diagnosis, prevention, and treatment, along with companies that are working to develop biopharmacologic medicines to more effectively treat cancers and viruses, two growing areas of biotechnology. ...And we think the long-term return potential is significant.

In summary, our portfolio is now dominated by large, U.S.-based companies that we believe have rock-solid balance sheets and strong free cash flows—companies we believe can survive a period of lackluster earnings, should that take place. For some of the companies we own, the dividend yield is better than the bond yield. We like financials; we believe natural gas-related companies have great potential; and we think biotechnology companies are singing.

Figure 41 Top Ten Holdings

Top Holdings 6/30/13

Company	ROE Return on Equity (%)	P/E Price/Earnings Ratio (Last 12 Months)	Free Cash Flow Yield (%)
Alliance Data Systems	>20	21.1	11.5
JP Morgan Chase & Co.	11.4	9.2	10.0
Philip Morris International	>20	16.2	2.1
Microsoft	20	12.9	7.9
Sonic Automotive	17.5	11.8	N.A.
State Street Corp	9.3	16.0	3.4
Westport Innovations			
Halliburton Company	17.6	15.0	N.A.
Oracle	>20	13.7	8.4
Celgene	>20	22.5	3.8

Source: Bloomberg & Capital IQ as of 6/30/13

Glossary

Balance Sheet is a financial statement that summarizes the assets and liabilities of a company or individual.

Book Value (BV) or "Book" equals total assets minus total liabilities. It is the owner's equity in the business, often quoted as Book Value/Share.

Cash Flow represents the cash a company is able to generate after paying out the money required to maintain or expand its business.

Consumer Confidence Index is defined as the degree of optimism on the state of the economy that consumers are expressing through their activities of savings and spending.

Defined-benefit plan is when the employer guarantees employee will receive a definite amount of benefit upon retirement, regardless of the performance of the underlying investments.

Discount Rate is the interest rate used in discounted cash flow analysis to determine the present value of future cash flows. The discount rate takes into account the time value of money (the idea that money available now is worth more than the same amount of money available in the future because it could be earning interest) and the risk or uncertainty of the anticipated future cash flows (which might be less than expected).

Dividend Yield (%) is a company's annual dividend payments divided by its market capitalization, or the dividend per share divided by the price per share.

Earnings Per Share (EPS) is the portion of a company's total profit that may be allocated to each share, computed by dividing net income (or earnings) by the total number of shares outstanding.

Exchange-Traded Fund (ETF) is an investment fund that tracks a commodity, a basket of securities, or an index (e.g. S&P 500, MSCI EAFE), but trades like a stock on an exchange. ETFs experience price changes throughout the day as they are bought and sold.

Fixed-Income Securities refer to any type of investment that yields a regular (or fixed) return.

Forward P/E or Estimated P/E is an estimate of the price-to-earnings (P/E) ratio where the earnings (E) are forecasted or estimated future earnings for a company.

Free Cash Flow Yield is a ratio calculated by dividing the Free Cash Flow per Share by the Current Market Price per Share.

Gross Domestic Product (GDP) is the total market value of all goods and services produced within a country in a given period of time (usually a calendar year).

LIBOR (London Interbank Offered Rate) is the interest rate at which banks can borrow funds from other banks in the London interbank market. LIBOR is fixed on a daily basis by the British Bankers' Association.

Mark-to-Market Accounting, aka FASB 157, took effect in November 2007 and required companies to "mark" their asset values to similar values of recently sold assets. In March 2009, FASB allowed more leeway in valuations, a move that eased balance-sheet pressures amongst banks and insurance companies.

Moodys Corporate Bond Baa Index is considered as medium-grade obligations (i.e., they are neither highly protected nor poorly secured). Interest payments and principal security appear adequate for the present, but certain protective elements may be lacking or may be characteristically unreliable over any great length of time. Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well. Moody's bond ratings reflect the credit quality of companies. The highest rating is AAA and the lowest rating is D.

Pension Plan is a type of retirement plan, usually tax exempt, wherein an employer makes contributions toward a pool of funds set aside for an employee's future benefit. The pool of funds is then invested on the employee's behalf, allowing the employee to receive benefits upon retirement. There are two main types: Defined-benefit plan: the employer guarantees employee will receive a definite amount of benefit upon retirement, regardless of the performance of the underlying investments. Defined-contribution plan: the employer makes predefined contributions for the employee, but the final amount of benefit received depends on the performance of the underlying investments

Price-to-Book (P/B) is the market capitalization divided by the owner's equity in the business. Note that P/B equals the price-to-earnings ratio (P/E) $\times$ (times) return on equity (ROE).

Price-to-Earnings (P/E) is the current price of a stock divided by the (trailing) 12 months earnings per share.

Return on Equity (ROE) is a company's net income (earnings) divided by the owner's equity in the business (Book Value); $ROE = \text{Earnings} / \text{Book Value}$. This percentage indicates company profitability or how efficiently a company is using its equity capital.

S&P/Case-Shiller Home Price Index is calculated from data on repeat sales of single-family homes, an approach developed by economists Karl Case, Robert Shiller, and Allan Weiss.

Securitization is a process which pools and repackages financial assets (like mortgages) into securities that are then sold to investors.

Appendix

All of the following essays are available on our website in the section labeled “Investment Principles.” If you are interested in receiving hard copies or learning more, please give us a call at (877) 935-5520.

The Trouble with Government Spending (1996), offers Ron’s perspective on taxes, federal spending, and their effects on the economy.

One Family’s Perspective on the U.S. Federal Budget (1988) gets personal with government spending.

To learn more about incentives and taxes, read *Prosperity* (1999) and *Economics and Why Election 2000 Is Important* (2000).

If you are interested in Ron’s ideas regarding tax reform, refer to *Why I Like the Flat Tax* (1996) and *Taxes—Choose Your Poison: Old Tax Return versus Proposed Tax Return* (2000).

To learn more about how inflation and interest rates affect your purchasing power, read *The Basics of Investing* (2002).

To learn more about recessions, read *Recessions: What Do They Look Like?* (2008).

To learn more about the government bailouts, read *Bailouts, Your Dollars, & the Whole Credit Mess* (2008).

To learn more about the velocity of money and the role of the Federal Reserve, read *What’s the New Normal?* (2009).

To learn about what made the 2008-09 recession different, read *U.S. Politics, Europe, and China: Why Do We Care?* (2011).

To learn more about how the consumer is faring, read *Consumer Spending* (2003).

To learn more about the impact of shale gas drilling, refer to *How Shale Gas Benefits the Consumer* (2012).

The comments made in this booklet are opinion and are not intended to be investment advice or a forecast of future events.

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